# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2220747
**Managing Division Abbreviation:** IOS **Amendment Number:** 000

## AWARDEE INFORMATION

**Award Recipient:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Awardee Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Awardee Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/10/2022
**Amendment Number:** 000
**Proposal Number:** 2220747
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/13/2022.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

## AWARD INFORMATION

**Award Number (FAIN):** 2220747
**Award Instrument:** Continuing Grant
**Award Date:** 08/10/2022
**Award Period of Performance:** Start Date: 09/01/2022 End Date: 08/31/2026
**Project Title:** EDGE FGT: MUSH-IT: MUlti-Species Hemimetabolous Insect Tools
**Managing Division Abbreviation:** IOS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-546 Enabling Discovery through GEnomics
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $850,000
**Total Intended Award Amount:** $1,700,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $850,000
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $425,000 |
| 2025 | $425,000 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Christine Castell
**Email:** ccastell@nsf.gov

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Theodore J. Morgan
**Email:** tmorgan@nsf.gov

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-546 Enabling Discovery through GEnomics.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |

| | |
|---|---|
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 4.00 |
| Post Doctoral Calendar Months | 48.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $265,200 |
| **Other Professionals** | |
| Other Professionals Count | 2.00 |
| Other Professionals Calendar Months | 12.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $48,960 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $314,160 |
| **C. Fringe Benefits** | $71,943 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $386,103 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $7,600 |
| International | $5,000 |
| **F. Participant Support Costs** | |

| | |
|---|---|
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $24,001 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 12.00 |
| *Total Participant Costs (F)* | $24,001 |
| **G. Other Direct Costs** | |
| Materials Supplies | $37,002 |
| Publication Costs | $12,265 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $40,787 |
| *Total Other Direct Costs (G)* | $90,054 |
| **H. Total Direct Costs (A Through G)** | **$512,758** |
| **I. Indirect Costs*** | **$337,242** |
| **J. Total Direct and Indirect Costs (H + I)** | $850,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$850,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

**From:** tmorgan@nsf.gov
**Reply-To:** tmorgan@nsf.gov
**To:** [redacted]
**CC:** tmorgan@nsf.gov; DGERSZEW@nsf.gov
**Subject:** NSF Approval of Continuing Grant Increment Award ID 2220747
**Status:** Sent on Tue 09/03/2024 09:00 AM

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Notification of NSF Approval of Additional Funding Support

Award No. 2220747
Amendment No. 001
Division Identifier: IOS
Release Date: 09/03/2024
Released By: Theodore Morgan
Amount: $425,000
Award End Date: 08/31/2026

As authorized by the original award, the National Science Foundation hereby releases $425,000 for additional support of the award referenced above. The award, with this amendment, now totals $1,275,000 and will end on 08/31/2026.

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF .

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Theodore Morgan , tmorgan@nsf.gov, (703)292-7868.

Any award specific questions of an administrative or financial nature should be addressed to the grants official at http://www.nsf.gov/bfa/dga/docs/liaison.pdf. The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2221715
**Managing Division Abbreviation:** ECCS **Amendment Number:** 000

## AWARDEE INFORMATION

**Award Recipient:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Awardee Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Awardee Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/23/2022
**Amendment Number:** 000
**Proposal Number:** 2221715
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2221715
**Award Instrument:** Standard Grant
**Award Date:** 08/23/2022
**Award Period of Performance:** Start Date: 08/01/2022 End Date: 07/31/2025
**Project Title:** Mid-infrared reconfigurable pulse generators
**Managing Division Abbreviation:** ECCS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 18-1517 Electronics, Photonics and Magnetic Devices
**Assistance Listing Number(s) and Name(s):** 47.041 Engineering Grants

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $360,000
**Total Intended Award Amount:** $360,000

**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $360,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Khoren Claiborne
**Email:** kclaibor@nsf.gov

**Awarding Official**
**Name:** Willis Phan
**Email:** wiphan@nsf.gov

**Managing Program Officer**
**Name:** Dominique M. Dagenais
**Email:** ddagenai@nsf.gov

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.15 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $5,795 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |

| | |
|---|---|
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $132,294 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $138,089 |
| **C. Fringe Benefits** | $1,367 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $139,456 |
| **D. Equipment** | $10,000 |
| **E. Travel** | |
| Domestic | $6,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $15,000 |

| | |
|---|---|
| Publication Costs | $4,500 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $65,112 |
| *Total Other Direct Costs (G)* | $84,612 |
| **H. Total Direct Costs (A Through G)** | **$240,068** |
| **I. Indirect Costs*** | **$119,932** |
| **J. Total Direct and Indirect Costs (H + I)** | $360,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$360,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2223880
**Managing Division Abbreviation:** DBI **Amendment Number:** 000

## AWARDEE INFORMATION

**Award Recipient:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Awardee Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Awardee Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/05/2022
**Amendment Number:** 000
**Proposal Number:** 2223880
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2223880
**Award Instrument:** Standard Grant
**Award Date:** 08/05/2022
**Award Period of Performance:** Start Date: 09/15/2022 End Date: 08/31/2026
**Project Title:** Collaborative Research: Digitization and Enrichment of U.S. Herbarium Data from Tropical Africa to Enable Urgent Quantitative Conservation Assessments
**Managing Division Abbreviation:** DBI
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-501 Infrastructure Capacity for Biological Research
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $232,968

**Total Intended Award Amount:** $232,968
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $232,968
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2223875 | Y | [redacted] | University of Kansas Center for Research Inc. |
| 2223876 | N | | The Regents of the University of California, Berkeley |
| 2223877 | N | | Rancho Santa Ana Botanic Garden |
| 2223878 | N | | Arizona Board of Regents Arizona State University |
| 2223879 | N | | Missouri Botanical Garden |
| 2223880 | N | | Harvard College, President & Fellows of Harvard University |
| 2223881 | N | | The New York Botanical Garden |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Christine Castell

**Awarding Official**
**Name:** Christine Castell
**Email:** ccastell@nsf.gov

**Managing Program Officer**
**Name:** Reed Schiele Beaman
**Email:** rsbeaman@nsf.gov

**Email:**
ccastell@nsf.gov

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-501 Infrastructure Capacity for Biological Research.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 16.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 3.00 |
| Other Professionals Calendar Months | 31.80 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $110,627 |
| **Graduate Students** | |

| | |
|---|---|
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $110,627 |
| **C. Fringe Benefits** | $61,730 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $172,357 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $1,500 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$173,857** |
| **I. Indirect Costs*** | **$59,111** |
| **J. Total Direct and Indirect Costs (H + I)** | $232,968 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$232,968** |

| M. Cost Sharing Proposed Level | $0 |
|---|---|

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 34.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2227964
**Managing Division Abbreviation:** IOS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/29/2023
**Amendment Number:** 000
**Proposal Number:** 2227964
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 03/14/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2227964
**Award Instrument:** Continuing Grant
**Award Date:** 03/29/2023
**Award Period of Performance:** Start Date: 04/01/2023 End Date: 03/31/2026
**Project Title:** Collaborative Research: Higher-order processing in a peripheral neural structure of a nudibranch mollusc
**Managing Division Abbreviation:** IOS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-506 Division of Integrative Organismal Systems Core Programs
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $302,900
**Total Intended Award Amount:** $326,200
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $302,900
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $23,300 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2227963 | Y | [redacted] | University of Massachusetts |
| 2227964 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov
**Phone:** (703) 292-4839

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Quentin Gaudry
**Email:** qgaudry@nsf.gov
**Phone:** (703) 292-2903

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement

which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-506 Division of Integrative Organismal Systems Core Programs.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 0.40 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $13,956 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 24.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $118,000 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |

| | |
|---|---|
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $131,956 |
| **C. Fringe Benefits** | $32,938 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $164,894 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $14,337 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $14,337 |
| **H. Total Direct Costs (A Through G)** | **$179,231** |
| **I. Indirect Costs*** | **$123,669** |
| **J. Total Direct and Indirect Costs (H + I)** | $302,900 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$302,900** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2228359
**Managing Division Abbreviation:** AGS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 11/01/2022
**Amendment Number:** 000
**Proposal Number:** 2228359
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2228359
**Award Instrument:** Standard Grant
**Award Date:** 11/01/2022
**Award Period of Performance:** Start Date: 11/01/2022 End Date: 10/31/2025
**Project Title:** Collaborative Research: Development and Applications of GEOS-Chem Atmospheric Chemistry in CESM and MUSICA
**Managing Division Abbreviation:** AGS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 98-1524 Atmospheric Chemistry
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $718,313
**Total Intended Award Amount:** $718,313
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $718,313
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| | | |
|---|---|---|
| **Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH |

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2228359 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2228379 | N | [redacted] | Massachusetts Institute of Technology |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Meredith Whitty
**Email:** mwhitty@nsf.gov
**Phone:** (703) 292-2759

**Awarding Official**
**Name:** Meredith Whitty
**Email:** mwhitty@nsf.gov

**Managing Program Officer**
**Name:** Sylvia Edgerton
**Email:** sedgerto@nsf.gov
**Phone:** (703) 292-8522

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 0.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 3.00 |
| Other Professionals Calendar Months | 18.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $144,083 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $132,951 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $277,034 |
| **C. Fringe Benefits** | $58,786 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $335,820 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $50,715 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $6,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $54,928 |
| *Total Other Direct Costs (G)* | $60,928 |
| **H. Total Direct Costs (A Through G)** | **$447,463** |
| **I. Indirect Costs*** | **$270,850** |
| **J. Total Direct and Indirect Costs (H + I)** | $718,313 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$718,313** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2231707
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/09/2023
**Amendment Number:** 000
**Proposal Number:** 2231707
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2231707
**Award Instrument:** Standard Grant
**Award Date:** 02/09/2023
**Award Period of Performance:** Start Date: 06/01/2023 End Date: 05/31/2026
**Project Title:** Collaborative Research: CIF: Small: Approximate Coded Computing - Fundamental Limits of Precision, Fault-tolerance and Privacy
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-616 Computer and Information Science and Engineering (CISE): Core Programs
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $250,000
**Total Intended Award Amount:** $250,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $250,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2231706 | Y | [redacted] | The Pennsylvania State University |
| 2231707 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** James E Fowler
**Email:** jafowler@nsf.gov
**Phone:** (703) 292-8910

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-616 Computer and Information Science and Engineering (CISE): Core Programs.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 1.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $21,315 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 3.00 |
| Post Doctoral Calendar Months | 19.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $97,290 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $118,605 |
| **C. Fringe Benefits** | $29,324 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $147,929 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$147,929** |
| **I. Indirect Costs*** | **$102,071** |
| **J. Total Direct and Indirect Costs (H + I)** | $250,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$250,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Modified Total Direct Cost | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2234308
**Managing Division Abbreviation:** BCS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 06/16/2023
**Amendment Number:** 000
**Proposal Number:** 2234308
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

No work with human subjects, including recruitment, may be conducted under this protocol or grant until IRB approval has been obtained.

## AWARD INFORMATION

**Award Number (FAIN):** 2234308
**Award Instrument:** Standard Grant
**Award Date:** 06/16/2023
**Award Period of Performance:** Start Date: 07/01/2023 End Date: 06/30/2026
**Project Title:** Evolved changes to neural systems for reactive aggression in humans and other primates
**Managing Division Abbreviation:** BCS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 98-1392 Biological Anthropology
**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $342,550
**Total Intended Award Amount:** $342,550
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $342,550
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tyffani N. Smith
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**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Rebecca Ferrell
**Email:** rferrell@nsf.gov
**Phone:** (703) 292-7850

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 1.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $17,075 |

| | |
|---|---|
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 2.00 |
| Post Doctoral Calendar Months | 24.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $100,500 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $36,766 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $154,341 |
| **C. Fringe Benefits** | $29,199 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $183,540 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $2,700 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |

| | |
|---|---|
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $16,451 |
| *Total Other Direct Costs (G)* | $16,451 |
| **H. Total Direct Costs (A Through G)** | **$202,691** |
| **I. Indirect Costs*** | **$139,859** |
| **J. Total Direct and Indirect Costs (H + I)** | $342,550 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$342,550** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2238071
**Managing Division Abbreviation:** IOS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 01/17/2023
**Amendment Number:** 000
**Proposal Number:** 2238071
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

It is the grantee's responsibility to ensure that any vertebrate animal work conducted under this award has Institutional Animal Care and Use Committee (IACUC) approval, where required, that the approval be from an organization that has a current Public Health Service-approved Animal Welfare Assurance, and that such approval remains valid at all times that vertebrate animal work is conducted under the award. See the NSF PAPPG Chapter II.D.4, for additional information. This condition extends to vertebrate animal work funded via use of a subaward. Failure to comply with this condition will result in suspension and/or termination of the award.

## AWARD INFORMATION

**Award Number (FAIN):** 2238071
**Award Instrument:** Continuing Grant
**Award Date:** 01/17/2023
**Award Period of Performance:** Start Date: 03/01/2023 End Date: 02/29/2028
**Project Title:** CAREER: Integrating brain-behavior evolution with real-world science impacts through neuroscience of working dogs
**Managing Division Abbreviation:** IOS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program

**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $225,291
**Total Intended Award Amount:** $1,361,007
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $225,291
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $347,079 |
| 2025 | $353,597 |
| 2026 | $360,310 |
| 2027 | $74,730 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Christine Castell
**Email:** ccastell@nsf.gov
**Phone:** (703) 292-4803

**Awarding Official**
**Name:** Christine Castell
**Email:** ccastell@nsf.gov

**Managing Program Officer**
**Name:** Colette Marie St. Mary
**Email:** cstmary@nsf.gov
**Phone:** (703) 292-4332

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early

Career Development Program.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $12,262 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 1.00 |
| Other Professionals Calendar Months | 0.84 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $10,920 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $13,215 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 2.00 |
| Undergraduate Students Amount | $16,320 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $52,717 |
| **C. Fringe Benefits** | $3,791 |

| | |
|---|---|
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $56,508 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $9,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $67,800 |
| *Total Other Direct Costs (G)* | $67,800 |
| **H. Total Direct Costs (A Through G)** | **$133,308** |
| **I. Indirect Costs*** | **$91,983** |
| **J. Total Direct and Indirect Costs (H + I)** | $225,291 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$225,291** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2238071
**Managing Division Abbreviation:** IOS **Amendment Number:** 002

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Frwd Funded
**Amendment Date:** 08/26/2024
**Amendment Number:** 002
**Proposal Number:** 2448019
**Amendment Description:**

The purpose of this amendment is to forward fund scheduled incremental funding to the award in the amount shown below in the Funding Information section.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2238071
**Award Instrument:** Continuing Grant
**Award Date:** 01/17/2023
**Award Period of Performance:** Start Date: 03/01/2023 End Date: 02/29/2028
**Project Title:** CAREER: Integrating brain-behavior evolution with real-world science impacts through neuroscience of working dogs
**Managing Division Abbreviation:** IOS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $353,597
**Total Intended Award Amount:** $1,361,007
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $925,967

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Termia M. Millard
**Email:** tmillard@nsf.gov
**Phone:** (703) 292-7074

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Colette Marie St. Mary
**Email:** cstmary@nsf.gov
**Phone:** (703) 292-4332

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $13,009 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |

| | |
|---|---|
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $57,845 |
| **Other Professionals** | |
| Other Professionals Count | 1.00 |
| Other Professionals Calendar Months | 0.84 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $11,585 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $14,019 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 2.00 |
| Undergraduate Students Amount | $17,314 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $113,772 |
| **C. Fringe Benefits** | $18,657 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $132,429 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $9,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |

| | |
|---|---|
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $67,800 |
| *Total Other Direct Costs (G)* | $67,800 |
| **H. Total Direct Costs (A Through G)** | **$209,229** |
| **I. Indirect Costs*** | **$144,368** |
| **J. Total Direct and Indirect Costs (H + I)** | $353,597 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$353,597** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2238113
**Managing Division Abbreviation:** DMR **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 12/20/2022
**Amendment Number:** 000
**Proposal Number:** 2238113
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Fiscal Year 2023 and 2024 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

## AWARD INFORMATION

**Award Number (FAIN):** 2238113
**Award Instrument:** Continuing Grant
**Award Date:** 12/20/2022
**Award Period of Performance:** Start Date: 02/01/2023 End Date: 01/31/2028
**Project Title:** CAREER: Manipulating Barocaloric Effects in Two-Dimensional Perovskites
**Managing Division Abbreviation:** DMR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $314,670
**Total Intended Award Amount:** $822,963
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $314,670
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $164,448 |
| 2026 | $169,382 |
| 2027 | $174,463 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov

**Managing Program Officer**
**Name:** Robert Meulenberg
**Email:** rmeulenb@nsf.gov
**Phone:** (703) 292-7106

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |

| | |
|---|---|
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $13,958 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $123,505 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $137,463 |
| **C. Fringe Benefits** | $3,085 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $140,548 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $2,030 |
| International | $0 |
| **F. Participant Support Costs** | |

| | |
|---|---|
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $20,300 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $34,504 |
| *Total Other Direct Costs (G)* | $54,804 |
| **H. Total Direct Costs (A Through G)** | **$197,382** |
| **I. Indirect Costs*** | **$117,288** |
| **J. Total Direct and Indirect Costs (H + I)** | $314,670 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$314,670** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

**From:** bschwen @nsf.gov
**Reply-To:** bschwenz@nsf.gov
**To:** [redacted]
**CC:** bschwenz@nsf.gov; nodom@nsf.gov
**Subject:** NSF Approval of Continuing Grant Increment Award ID 2238113
**Status:** Sent on Mon 02/10/2025 06:34 PM

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Notification of NSF Approval of Additional Funding Support

Award No. 2238113
Amendment No. 001
Division Identifier: DMR
Release Date: 02/10/2025
Released By: Birgit Schwenzer
Amount: $164,448
Award End Date: 01/31/2028

As authorized by the original award, the National Science Foundation hereby releases $164,448 for additional support of the award referenced above. The award, with this amendment, now totals $479,118 and will end on 01/31/2028.

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF .

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Birgit Schwenzer , bschwenz@nsf.gov, (703)292-4771.

Any award specific questions of an administrative or financial nature should be addressed to the grants official at http://www.nsf.gov/bfa/dga/docs/liaison.pdf. The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2238714
**Managing Division Abbreviation:** IIS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/13/2023
**Amendment Number:** 000
**Proposal Number:** 2238714
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Incentive payments or gifts to participants must be made in accordance with written institutional policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

No work with human subjects, including recruitment, may be conducted under this protocol or grant until IRB approval has been obtained.

## AWARD INFORMATION

**Award Number (FAIN):** 2238714
**Award Instrument:** Continuing Grant
**Award Date:** 02/13/2023
**Award Period of Performance:** Start Date: 08/01/2023 End Date: 07/31/2028
**Project Title:** Career: Towards a Systematic Characterization of Model Explanations for High-Stakes Decision Making
**Managing Division Abbreviation:** IIS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program

**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $104,404
**Total Intended Award Amount:** $550,664
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $104,404
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $107,188 |
| 2025 | $110,048 |
| 2026 | $112,995 |
| 2027 | $116,029 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov
**Phone:** (703) 292-7859

**Awarding Official**
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov

**Managing Program Officer**
**Name:** Roger Mailler
**Email:** rmailler@nsf.gov
**Phone:** (703) 292-7982

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early

Career Development Program.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $43,970 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $43,970 |
| **C. Fringe Benefits** | $0 |

| | |
|---|---|
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $43,970 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $1,500 |
| International | $2,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $21,765 |
| *Total Other Direct Costs (G)* | $21,765 |
| **H. Total Direct Costs (A Through G)** | **$69,235** |
| **I. Indirect Costs*** | **$35,169** |
| **J. Total Direct and Indirect Costs (H + I)** | $104,404 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$104,404** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC TDC less Tuition | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

**From:** eplaku@nsf.gov
**Reply-To:** eplaku@nsf.gov
**To:** [redacted]
**CC:** eplaku@nsf.gov; swolley@nsf.gov
**Subject:** NSF Approval of Continuing Grant Increment Award ID 2238714
**Status:** Sent on Thu 08/29/2024 10:07 AM

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Notification of NSF Approval of Additional Funding Support

Award No. 2238714
Amendment No. 001
Division Identifier: IIS
Release Date: 08/29/2024
Released By: Erion Plaku
Amount: $107,188
Award End Date: 07/31/2028

As authorized by the original award, the National Science Foundation hereby releases $107,188 for additional support of the award referenced above. The award, with this amendment, now totals $211,592 and will end on 07/31/2028.

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF .

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Erion Plaku , eplaku@nsf.gov, (703)292-4426.

Any award specific questions of an administrative or financial nature should be addressed to the grants official at http://www.nsf.gov/bfa/dga/docs/liaison.pdf. The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2238836
**Managing Division Abbreviation:** CCF **Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Supplement
**Amendment Date:** 06/08/2023
**Amendment Number:** 001
**Proposal Number:** 2329694
**Amendment Description:**

The purpose of this amendment is to:

- Add supplemental support to the award in the amount shown below in the Funding Information section.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special_conditions.jsp.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any

of its components, including, but not limited to, laboratories, departments and centers.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2238836
**Award Instrument:** Continuing Grant
**Award Date:** 01/30/2023
**Award Period of Performance:** Start Date: 02/15/2023 End Date: 01/31/2028
**Project Title:** CAREER: Complexity of quantum many-body systems: learnability, approximations, and entanglement
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.079 Office of International Science and Engineering (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $30,000
**Total Intended Award Amount:** $494,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $103,485

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Almadena Y. Chtchelkanova
**Email:** achtchel@nsf.gov
**Phone:** (703) 292-7498

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and

NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |

| | |
|---|---|
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $18,000 |
| Participant Support Costs Travel | $12,000 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 3.00 |
| *Total Participant Costs (F)* | $30,000 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$30,000** |
| **I. Indirect Costs*** | **$0** |
| **J. Total Direct and Indirect Costs (H + I)** | $30,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$30,000** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2238836
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 01/30/2023
**Amendment Number:** 000
**Proposal Number:** 2238836
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

## AWARD INFORMATION

**Award Number (FAIN):** 2238836
**Award Instrument:** Continuing Grant
**Award Date:** 01/30/2023
**Award Period of Performance:** Start Date: 02/15/2023 End Date: 01/31/2028
**Project Title:** CAREER: Complexity of quantum many-body systems: learnability, approximations, and entanglement
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and

Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $73,485
**Total Intended Award Amount:** $494,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $73,485
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $84,232 |
| 2025 | $109,098 |
| 2026 | $112,065 |
| 2027 | $115,120 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Almadena Y. Chtchelkanova
**Email:** achtchel@nsf.gov
**Phone:** (703) 292-7498

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $15,327 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 5.00 |
| Graduate Students Amount | $18,035 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $33,362 |
| **C. Fringe Benefits** | $3,387 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $36,749 |
| **D. Equipment** | $0 |
| **E. Travel** | |

| | |
|---|---|
| Domestic | $2,500 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $2,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $3,774 |
| *Total Other Direct Costs (G)* | $5,774 |
| **H. Total Direct Costs (A Through G)** | **$45,023** |
| **I. Indirect Costs*** | **$28,462** |
| **J. Total Direct and Indirect Costs (H + I)** | $73,485 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$73,485** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2239234
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 12/28/2022
**Amendment Number:** 000
**Proposal Number:** 2239234
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2239234
**Award Instrument:** Continuing Grant
**Award Date:** 12/28/2022
**Award Period of Performance:** Start Date: 07/01/2023 End Date: 06/30/2028
**Project Title:** CAREER: Statistical Inference in High Dimensions using Variational Approximations
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences
(Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $86,479

**Total Intended Award Amount:** $434,135
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $86,479
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $83,381 |
| 2025 | $85,414 |
| 2026 | $87,508 |
| 2027 | $91,353 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Aprile N Roberson
**Email:** aroberso@nsf.gov

**Managing Program Officer**
**Name:** Edsel A Pena
**Email:** epena@nsf.gov
**Phone:** (703) 292-8080

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

**A. Senior Personnel**

| | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $15,478 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $20,022 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $35,500 |
| **C. Fringe Benefits** | $3,421 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $38,921 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $3,000 |
| International | $4,000 |
| **F. Participant Support Costs** | |

| | |
|---|---|
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $3,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $2,250 |
| *Total Other Direct Costs (G)* | $5,250 |
| **H. Total Direct Costs (A Through G)** | **$51,171** |
| **I. Indirect Costs*** | **$35,308** |
| **J. Total Direct and Indirect Costs (H + I)** | $86,479 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$86,479** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2239242
**Managing Division Abbreviation:** AGS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/10/2023
**Amendment Number:** 000
**Proposal Number:** 2239242
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2239242
**Award Instrument:** Standard Grant
**Award Date:** 03/10/2023
**Award Period of Performance:** Start Date: 03/15/2023 End Date: 02/29/2028
**Project Title:** CAREER: Using Tracer Interrelationships to Understand Large-Scale Geophysical Flows and their Changes
**Managing Division Abbreviation:** AGS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $897,379
**Total Intended Award Amount:** $897,379
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $897,379
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Meredith Whitty
**Email:** mwhitty@nsf.gov
**Phone:** (703) 292-2759

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Varavut Limpasuvan
**Email:** vlimpasu@nsf.gov
**Phone:** (703) 292-2746

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 5.00 |
| Senior Personnel Calendar Months | 5.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $74,865 |

| | |
|---|---|
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 8.00 |
| Graduate Students Amount | $307,920 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 2.00 |
| Undergraduate Students Amount | $16,320 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 1.00 |
| Other Amount | $8,320 |
| *Total Salaries and Wages (A+B)* | $407,425 |
| **C. Fringe Benefits** | $18,160 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $425,585 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $49,719 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |

| | |
|---|---|
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $15,000 |
| Consultant Services | $12,480 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $47,673 |
| *Total Other Direct Costs (G)* | $75,153 |
| **H. Total Direct Costs (A Through G)** | **$550,457** |
| **I. Indirect Costs*** | **$346,922** |
| **J. Total Direct and Indirect Costs (H + I)** | $897,379 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$897,379** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2239242
**Managing Division Abbreviation:** AGS **Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Supplement
**Amendment Date:** 11/14/2024
**Amendment Number:** 001
**Proposal Number:** 2445836
**Amendment Description:**

The purpose of this amendment is to:

- Add supplemental support to the award in the amount shown below in the Funding Information section.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2239242
**Award Instrument:** Standard Grant
**Award Date:** 03/10/2023
**Award Period of Performance:** Start Date: 03/15/2023 End Date: 02/29/2028
**Project Title:** CAREER: Using Tracer Interrelationships to Understand Large-Scale Geophysical Flows and their Changes
**Managing Division Abbreviation:** AGS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $48,964
**Total Intended Award Amount:** $897,379
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $946,343

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Staci Jenkins
**Email:** sjenkins@nsf.gov
**Phone:** (703) 292-5042

**Awarding Official**
**Name:** Termia M. Talbert
**Email:** ttalbert@nsf.gov

**Managing Program Officer**
**Name:** Yolande L. Serra
**Email:** yserra@nsf.gov
**Phone:** (703) 292-2651

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 3.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $24,240 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |

| | |
|---|---|
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $24,240 |
| **C. Fringe Benefits** | $4,733 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $28,973 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |

| | |
|---|---|
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$28,973** |
| **I. Indirect Costs*** | **$19,991** |
| **J. Total Direct and Indirect Costs (H + I)** | $48,964 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$48,964** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2239780
**Managing Division Abbreviation:** IIS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 09/11/2023
**Amendment Number:** 000
**Proposal Number:** 2239780
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2239780
**Award Instrument:** Standard Grant
**Award Date:** 09/11/2023
**Award Period of Performance:** Start Date: 10/01/2023 End Date: 09/30/2028
**Project Title:** CAREER: Developing Neural Network Theory for Uncovering How the Brain Learns
**Managing Division Abbreviation:** IIS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $602,466

**Total Intended Award Amount:** $602,466
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $602,466
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov
**Phone:** (703) 292-7859

**Awarding Official**
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov

**Managing Program Officer**
**Name:** Kenneth C. Whang
**Email:** kwhang@nsf.gov
**Phone:** (703) 292-5149

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 5.00 |
| Senior Personnel Calendar Months | 5.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $76,228 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 5.00 |
| Graduate Students Amount | $191,709 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $267,937 |
| **C. Fringe Benefits** | $16,847 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $284,784 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $20,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $1,500 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 1.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $1,500 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $85,880 |
| *Total Other Direct Costs (G)* | $85,880 |
| **H. Total Direct Costs (A Through G)** | **$392,164** |
| **I. Indirect Costs*** | **$210,302** |
| **J. Total Direct and Indirect Costs (H + I)** | $602,466 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$602,466** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| F&A | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2239795
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 04/26/2023
**Amendment Number:** 000
**Proposal Number:** 2239795
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

## AWARD INFORMATION

**Award Number (FAIN):** 2239795
**Award Instrument:** Continuing Grant
**Award Date:** 04/26/2023
**Award Period of Performance:** Start Date: 05/01/2023 End Date: 04/30/2028
**Project Title:** CAREER: Towards Particle Physics Discoveries With Double Cascades In IceCube and Beyond
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences

(Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $179,299
**Total Intended Award Amount:** $870,025
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $179,299
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $173,719 |
| 2025 | $178,569 |
| 2026 | $166,897 |
| 2027 | $171,541 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** William Wester
**Email:** wwester@nsf.gov
**Phone:** (703) 292-4677

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $6,734 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $64,840 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $71,574 |
| **C. Fringe Benefits** | $1,488 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $73,062 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $5,036 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $1,500 |
| Participant Support Costs Subsistence | $2,070 |
| Participant Support Costs Other | $28,533 |
| Total Number of Participants | 10.00 |
| *Total Participant Costs (F)* | $32,103 |
| **G. Other Direct Costs** | |
| Materials Supplies | $9,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $9,000 |
| **H. Total Direct Costs (A Through G)** | **$119,201** |
| **I. Indirect Costs*** | **$60,098** |
| **J. Total Direct and Indirect Costs (H + I)** | $179,299 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$179,299** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

**From:** htakai@nsf.gov
**Reply To:** htakai@nsf.gov
**To:** [redacted]
**CC:** htakai@nsf.gov; kpigford@nsf.gov
**Subject:** NSF Approval of Continuing Grant Increment - Award ID - 2239795
**Status:** Sent on Tue 05/13/2025 02:54 PM

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Notification of NSF Approval of Additional Funding Support

Award No. 2239795
Amendment No. 003
Division Identifier: PHY
Release Date: 05/13/2025
Released By: Helio Takai
Amount: $178,569
Award End Date: 04/30/2028

As authorized by the original award, the National Science Foundation hereby releases $178,569 for additional support of the award referenced above. The award, with this amendment, now totals $557,803 and will end on 04/30/2028 .

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org_NSF .

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Helio Takai , htakai@nsf.gov , (703)292-4565 .

Any award specific questions of an administrative or financial nature should be addressed to the grants official at http://www.nsf.gov/bfa/dga/docs/liaison.pdf . The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2241885
**Managing Division Abbreviation:** SES **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 05/15/2023
**Amendment Number:** 000
**Proposal Number:** 2241885
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 04/12/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2241885
**Award Instrument:** Standard Grant
**Award Date:** 05/15/2023
**Award Period of Performance:** Start Date: 06/01/2023 End Date: 05/31/2025
**Project Title:** Collaborative Research: State Health, Institutions, and Politics Survey (SHIPS)
**Managing Division Abbreviation:** SES
**Research and Development Award:** Yes
**Funding Opportunity:** PD 19-120Y Accountable Institutions and Behavior
**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $332,169

**Total Intended Award Amount:** $332,169
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $332,169
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2241884 | Y | [redacted] | Northwestern University |
| 2241885 | N | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2241886 | N | [redacted] | Rutgers, The State University of New Jersey |
| 2241887 | N | [redacted] | Northeastern University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov
**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Brian Crisp
**Email:** bcrisp@nsf.gov
**Phone:** (703) 292-7951

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended

(42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 0.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $13,687 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |

| | |
|---|---|
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $13,687 |
| **C. Fringe Benefits** | $3,025 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $16,712 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $179,838 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $179,838 |
| **H. Total Direct Costs (A Through G)** | **$196,550** |
| **I. Indirect Costs*** | **$135,619** |
| **J. Total Direct and Indirect Costs (H + I)** | $332,169 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$332,169** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2243704
**Managing Division Abbreviation:** MCB **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/06/2023
**Amendment Number:** 000
**Proposal Number:** 2243704
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 12/09/2022.

## AWARD INFORMATION

**Award Number (FAIN):** 2243704
**Award Instrument:** Standard Grant
**Award Date:** 03/06/2023
**Award Period of Performance:** Start Date: 03/15/2023 End Date: 02/29/2028
**Project Title:** Collaborative Research: Ideas Lab: Discovery of Novel Functional RNA Classes by Computational Integration of Massively-Parallel RBP Binding and Structure Data
**Managing Division Abbreviation:** MCB
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-510 Dark Dimensions of the RNA Regulome
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $932,563
**Total Intended Award Amount:** $932,563
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $932,563
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2243703 | Y | [redacted] | Oregon State University |
| 2243704 | N | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2243705 | N | [redacted] | California Institute of Technology |
| 2243706 | N | [redacted] | GA Tech Research Corporation, GA Institute of Technology |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Staci Jenkins
**Email:** sjenkins@nsf.gov
**Phone:** (703) 292-5042

**Awarding Official**
**Name:** Staci Jenkins
**Email:** sjenkins@nsf.gov

**Managing Program Officer**
**Name:** Stephen DiFazio
**Email:** sdifazio@nsf.gov
**Phone:** (703) 292-4517

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and

NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-510 Dark Dimensions of the RNA Regulome.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 5.00 |
| Senior Personnel Calendar Months | 1.75 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $26,318 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 5.00 |
| Post Doctoral Calendar Months | 60.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $345,094 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 10.00 |
| Undergraduate Students Amount | $80,275 |

| | |
|---|---|
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $451,687 |
| **C. Fringe Benefits** | $93,125 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $544,812 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $3,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $4,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $4,000 |
| **H. Total Direct Costs (A Through G)** | **$551,812** |
| **I. Indirect Costs*** | **$380,751** |
| **J. Total Direct and Indirect Costs (H + I)** | $932,563 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$932,563** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2243724
**Managing Division Abbreviation:** CHE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Renewal
**Amendment Date:** 08/14/2023
**Amendment Number:** 000
**Proposal Number:** 2243724
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 06/22/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2243724
**Award Instrument:** Standard Grant
**Award Date:** 08/14/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** Photoactivation of Stable Bonds for Chemical Conversions
**Managing Division Abbreviation:** CHE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-605 Division of Chemistry: Disciplinary Research Programs
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $700,000

**Total Intended Award Amount:** $700,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $700,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Paul Blakemore
**Email:** pblakemo@nsf.gov
**Phone:** (703) 292-2726

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-605 Division of Chemistry: Disciplinary Research Programs.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.75 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $35,134 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $209,470 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $244,604 |
| **C. Fringe Benefits** | $7,554 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $252,158 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $75,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $117,016 |
| *Total Other Direct Costs (G)* | $192,016 |
| **H. Total Direct Costs (A Through G)** | **$444,174** |
| **I. Indirect Costs*** | **$255,826** |
| **J. Total Direct and Indirect Costs (H + I)** | $700,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$700,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2245246
**Managing Division Abbreviation:** DMR **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Renewal
**Amendment Date:** 03/06/2023
**Amendment Number:** 000
**Proposal Number:** 2245246
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 02/27/2023.

Fiscal Year 2023 and 2024 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

## AWARD INFORMATION

**Award Number (FAIN):** 2245246
**Award Instrument:** Continuing Grant
**Award Date:** 03/06/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2027
**Project Title:** Strange metals and the phases of quantum materials
**Managing Division Abbreviation:** DMR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-610 Condensed Matter and Materials Theory
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $330,000
**Total Intended Award Amount:** $660,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $330,000
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $165,000 |
| 2026 | $165,000 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov

**Managing Program Officer**
**Name:** Serdar Ogut
**Email:** sogut@nsf.gov
**Phone:** (703) 292-4429

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-610 Condensed Matter and Materials Theory.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |

| | |
|---|---|
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 11.50 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $66,010 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $89,040 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $155,050 |
| **C. Fringe Benefits** | $16,701 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $171,751 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |

| | |
|---|---|
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $39,741 |
| *Total Other Direct Costs (G)* | $39,741 |
| **H. Total Direct Costs (A Through G)** | **$211,492** |
| **I. Indirect Costs*** | **$118,508** |
| **J. Total Direct and Indirect Costs (H + I)** | $330,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$330,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

**From:** aklirono@nsf.gov
**Reply To:** aklirono@nsf.gov
**To:** [redacted]
**CC:** aklirono@nsf.gov; nodom@nsf.gov
**Subject:** NSF Approval of Continuing Grant Increment - Award ID - 2245246
**Status:** Sent on Fri 02/28/2025 03:45 PM

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Notification of NSF Approval of Additional Funding Support

Award No. 2245246
Amendment No. 001
Division Identifier: DMR
Release Date: 02/28/2025
Released By: Alexios Klironomos
Amount: $165,000
Award End Date: 08/31/2027

As authorized by the original award, the National Science Foundation hereby releases $165,000 for additional support of the award referenced above. The award, with this amendment, now totals $495,000 and will end on 08/31/2027 .

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org_NSF .

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Alexios Klironomos , aklirono@nsf.gov , (703)292-4920 .

Any award specific questions of an administrative or financial nature should be addressed to the grants official at http://www.nsf.gov/bfa/dga/docs/liaison.pdf . The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2246518
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/24/2023
**Amendment Number:** 000
**Proposal Number:** 2246518
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2246518
**Award Instrument:** Standard Grant
**Award Date:** 03/24/2023
**Award Period of Performance:** Start Date: 07/01/2023 End Date: 06/30/2026
**Project Title:** Positive Vector Bundles in Combinatorics
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 18-7970 Combinatorics
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $202,319

**Total Intended Award Amount:** $202,319
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $202,319
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Stefaan Guido De Winter
**Email:** sgdewint@nsf.gov
**Phone:** (703) 292-2599

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 6.00 |
| Senior Personnel Amount | $59,963 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |

| | |
|---|---|
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $59,963 |
| **C. Fringe Benefits** | $13,252 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $73,215 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $22,500 |
| International | $24,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |

| | |
|---|---|
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$119,715** |
| **I. Indirect Costs*** | **$82,604** |
| **J. Total Direct and Indirect Costs (H + I)** | $202,319 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$202,319** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2246630
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/30/2023
**Amendment Number:** 000
**Proposal Number:** 2246630
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 03/14/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2246630
**Award Instrument:** Standard Grant
**Award Date:** 03/30/2023
**Award Period of Performance:** Start Date: 07/01/2023 End Date: 06/30/2026
**Project Title:** Bifurcations in Complex Algebraic Dynamics
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 20-1281 Analysis
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $446,934

**Total Intended Award Amount:** $446,934
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $446,934
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email** [redacted]

**Organization:**
PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Aprile N Roberson
**Email:** aroberso@nsf.gov

**Managing Program Officer**
**Name:** Jeremy Tyson
**Email:** jtyson@nsf.gov
**Phone:** (703) 292-7210

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 4.50 |
| Senior Personnel Amount | $148,517 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |

| | |
|---|---|
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $53,118 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $201,635 |
| **C. Fringe Benefits** | $32,823 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $234,458 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $15,000 |
| International | $15,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |

| G. Other Direct Costs | |
|---|---|
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$264,458** |
| **I. Indirect Costs*** | **$182,476** |
| **J. Total Direct and Indirect Costs (H + I)** | $446,934 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$446,934** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2246746
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/28/2023
**Amendment Number:** 000
**Proposal Number:** 2246746
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2246746
**Award Instrument:** Standard Grant
**Award Date:** 03/28/2023
**Award Period of Performance:** Start Date: 07/01/2023 End Date: 06/30/2026
**Project Title:** Classification and invariants for Borel equivalence relations
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 18-1268 Foundations
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $163,146

**Total Intended Award Amount:** $163,146
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $163,146
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Tomek Bartoszynski
**Email:** tbartosz@nsf.gov
**Phone:** (703) 292-4885

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 6.00 |
| Senior Personnel Amount | $62,683 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |

| | |
|---|---|
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $62,683 |
| **C. Fringe Benefits** | $13,853 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $76,536 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $13,500 |
| International | $6,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |

| | |
|---|---|
| Materials Supplies | $500 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $500 |
| **H. Total Direct Costs (A Through G)** | **$96,536** |
| **I. Indirect Costs*** | **$66,610** |
| **J. Total Direct and Indirect Costs (H + I)** | $163,146 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$163,146** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2246746

**Managing Division Abbreviation:** DMS

**Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Other Admin No Fund Actions
**Amendment Date:** 10/17/2023
**Amendment Number:** 001
**Proposal Number:** Not Applicable
**Amendment Description:**

The purpose of this amendment is to change the PI or co-PI in accordance with the Change PI and Add/Change Co-PI request submitted on 10/13/2023. Effective with this amendment, the project is now under the direction of [redacted]

Except as modified by this amendment, the award conditions remain unchanged.

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Lynda Kummelt

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Tomek

**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

Bartoszynski
**Email:** tbartosz@nsf.gov
**Phone:** (703) 292-4885

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2247494
**Managing Division Abbreviation:** CHE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/12/2023
**Amendment Number:** 000
**Proposal Number:** 2247494
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 06/08/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2247494
**Award Instrument:** Standard Grant
**Award Date:** 07/12/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** Screening for Generality in Asymmetric Catalysis
**Managing Division Abbreviation:** CHE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-605 Division of Chemistry: Disciplinary Research Programs
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $575,000

**Total Intended Award Amount:** $575,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $575,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Paul Blakemore
**Email:** pblakemo@nsf.gov
**Phone:** (703) 292-2726

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-605 Division of Chemistry: Disciplinary Research Programs.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 1.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $50,242 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $136,021 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $186,263 |
| **C. Fringe Benefits** | $10,802 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $197,065 |
| **D. Equipment** | $9,945 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $78,346 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $83,423 |
| *Total Other Direct Costs (G)* | $161,769 |
| **H. Total Direct Costs (A Through G)** | **$368,779** |
| **I. Indirect Costs*** | **$206,221** |
| **J. Total Direct and Indirect Costs (H + I)** | $575,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$575,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2247817
**Managing Division Abbreviation:** CHE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Renewal
**Amendment Date:** 07/05/2023
**Amendment Number:** 000
**Proposal Number:** 2247817
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2247817
**Award Instrument:** Standard Grant
**Award Date:** 07/05/2023
**Award Period of Performance:** Start Date: 07/15/2023 End Date: 06/30/2026
**Project Title:** CAS: Collaborative Research: Electronic Structure/Function Relationships Underpinning Atom Transfer Reactivity
**Managing Division Abbreviation:** CHE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-605 Division of Chemistry: Disciplinary Research Programs
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $361,035
**Total Intended Award Amount:** $361,035
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $361,035
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2247817 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2247818 | N | [redacted] | Cornell University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Tingyu Li
**Email:** tli@nsf.gov
**Phone:** (703) 292-4949

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-605 Division of Chemistry: Disciplinary Research Programs.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $135,567 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $135,567 |

| | |
|---|---|
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $135,567 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $6,182 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $27,818 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $68,069 |
| *Total Other Direct Costs (G)* | $95,887 |
| **H. Total Direct Costs (A Through G)** | **$237,636** |
| **I. Indirect Costs*** | **$123,399** |
| **J. Total Direct and Indirect Costs (H + I)** | $361,035 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$361,035** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2301180

**Managing Division Abbreviation:** DRL

**Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/16/2023
**Amendment Number:** 000
**Proposal Number:** 2301180
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

The ECR program has a resource coordination hub that is responsible for synthesizing findings across the ECR portfolio, providing technical assistance to ECR projects, promoting national awareness of research contributions from the ECR portfolio, and building the ECR community through PI and special interest meetings. All ECR projects are expected to share their findings with the resource coordination hub, to participate in biennial PI meetings, and other meetings of interest and to be responsive to requests for information from the resource coordination hub. If additional information is needed, contact the cognizant NSF Program Officer.

Fiscal Year 2023 and 2024 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

It is the grantee's responsibility to ensure that any human subjects work conducted under this award has an Institutional Review Board (IRB) approval, where required, and that such approval remains valid at all times that human subjects work is conducted under the award. Failure to comply with this condition will result in suspension and/or termination of the award.

The Foundation authorizes the awardee to enter into the proposed subaward arrangement. The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

Incentive payments or gifts to participants must be made in accordance with written institutional policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

## AWARD INFORMATION

**Award Number (FAIN):** 2301180
**Award Instrument:** Continuing Grant
**Award Date:** 07/16/2023
**Award Period of Performance:** Start Date: 08/01/2023 End Date: 07/31/2028
**Project Title:** Cognitive Mechanisms of Guided Instruction in the Early Elementary Years
**Managing Division Abbreviation:** DRL
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-588 EHR Core Research
**Assistance Listing Number(s) and Name(s):** 47.076 Education and Human Resources (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $655,096
**Total Intended Award Amount:** $1,500,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $655,096
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $376,538 |
| 2026 | $355,860 |
| 2027 | $112,506 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted]
**Organization:** RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

**co-Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** UNIVERSITY OF CALIFORNIA, SAN DIEGO

**co-Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov
**Phone:** (703) 292-8709

**Awarding Official**
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov

**Managing Program Officer**
**Name:** Michael Ford
**Email:** miford@nsf.gov
**Phone:** (703) 292-5153

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-588 EHR Core Research.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 4.00 |
| Senior Personnel Calendar Months | 24.40 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $160,244 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |

| | |
|---|---|
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 1.00 |
| Other Professionals Calendar Months | 5.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $21,029 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $11,240 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 2.00 |
| Other Amount | $500 |
| *Total Salaries and Wages (A+B)* | $193,013 |
| **C. Fringe Benefits** | $53,055 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $246,068 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $3,038 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |

| G. Other Direct Costs | |
|---|---|
| Materials Supplies | $1,600 |
| Publication Costs | $1,500 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $190,214 |
| Other | $4,500 |
| *Total Other Direct Costs (G)* | $197,814 |
| **H. Total Direct Costs (A Through G)** | **$446,920** |
| **I. Indirect Costs*** | **$208,176** |
| **J. Total Direct and Indirect Costs (H + I)** | $655,096 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$655,096** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2301180

**Managing Division Abbreviation:** DRL

**Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Frwd Funded
**Amendment Date:** 09/18/2024
**Amendment Number:** 001
**Proposal Number:** 2450422
**Amendment Description:**

The purpose of this amendment is to forward fund scheduled incremental funding to the award in the amount shown below in the Funding Information section.

This amendment includes funds that were originally scheduled to be released in a future fiscal year. It is still the grantee's responsibility to submit an annual project report for each year in accordance with the NSF policies.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2301180
**Award Instrument:** Continuing Grant
**Award Date:** 07/16/2023
**Award Period of Performance:** Start Date: 08/01/2023 End Date: 07/31/2028
**Project Title:** Cognitive Mechanisms of Guided Instruction in the Early Elementary Years
**Managing Division Abbreviation:** DRL
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-588 EDU Core Research
**Assistance Listing Number(s) and Name(s):** 47.076 Education and Human Resources (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $376,538
**Total Intended Award Amount:** $1,500,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,031,634

## PROJECT PERSONNEL

| | | |
|---|---|---|
| **Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** RUTGERS, THE STATE UNIVERSITY |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** UNIVERSITY OF CALIFORNIA, SAN DIEGO |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Tracy N. Shields
**Email:** tshields@nsf.gov
**Phone:** (703) 292-4882

**Awarding Official**
**Name:** Denise M. Martin
**Email:** dmartin@nsf.gov

**Managing Program Officer**
**Name:** Michael Ford
**Email:** miford@nsf.gov
**Phone:** (703) 292-5153

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 12.20 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $83,745 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $12,770 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 1.00 |
| Other Amount | $250 |
| *Total Salaries and Wages (A+B)* | $96,765 |
| **C. Fringe Benefits** | $22,384 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $119,149 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $2,925 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $3,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $152,839 |
| Other | $5,250 |
| *Total Other Direct Costs (G)* | $161,089 |
| **H. Total Direct Costs (A Through G)** | **$283,163** |
| **I. Indirect Costs*** | **$93,375** |
| **J. Total Direct and Indirect Costs (H + I)** | $376,538 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$376,538** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2301246
**Managing Division Abbreviation:** DRL **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 04/29/2023
**Amendment Number:** 000
**Proposal Number:** 2301246
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Fiscal Year 2023 and 2024 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

No work with human subjects, including recruitment, may be conducted under this protocol or grant until IRB approval has been obtained.

## AWARD INFORMATION

**Award Number (FAIN):** 2301246
**Award Instrument:** Continuing Grant
**Award Date:** 04/29/2023
**Award Period of Performance:** Start Date: 05/01/2023 End Date: 04/30/2026
**Project Title:** Collaborative Research: Promoting Math Skills through Playful Communication in the Home Environment
**Managing Division Abbreviation:** DRL
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-588 EHR Core Research
**Assistance Listing Number(s) and Name(s):** 47.076 Education and Human Resources (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $137,579
**Total Intended Award Amount:** $216,238
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $137,579
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $78,659 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2301245 | Y | [redacted] | University of Maryland |
| 2301246 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov
**Phone:** (703) 292-8709

**Awarding Official**
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov

**Managing Program Officer**
**Name:** Eric Knuth
**Email:** eknuth@nsf.gov
**Phone:**

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended

(42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-588 EHR Core Research.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 2.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $42,521 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $26,833 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |

| | |
|---|---|
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $69,354 |
| **C. Fringe Benefits** | $12,054 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $81,408 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$81,408** |
| **I. Indirect Costs*** | **$56,171** |
| **J. Total Direct and Indirect Costs (H + I)** | $137,579 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$137,579** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

**From:** eknuth@nsf.gov
**Reply To:** eknuth@nsf.gov
**To:** [redacted]
**CC:** eknuth@nsf.gov; adapedo@nsf.gov
**Subject:** NSF Approval of Continuing Grant Increment - Award ID - 2301246
**Status:** Sent on Mon 02/24/2025 02:06 PM

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Notification of NSF Approval of Additional Funding Support

Award No. 2301246
Amendment No. 001
Division Identifier: DRL
Release Date: 02/24/2025
Released By: Eric Knuth
Amount: $78,659
Award End Date: 04/30/2026

As authorized by the original award, the National Science Foundation hereby releases $78,659 for additional support of the award referenced above. The award, with this amendment, now totals $216,238 and will end on 04/30/2026 .

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org_NSF .

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Eric Knuth , eknuth@nsf.gov , (703)292-8402 .

Any award specific questions of an administrative or financial nature should be addressed to the grants official at http://www.nsf.gov/bfa/dga/docs/liaison.pdf . The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2303486
**Managing Division Abbreviation:** OCE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 06/22/2023
**Amendment Number:** 000
**Proposal Number:** 2303486
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2303486
**Award Instrument:** Standard Grant
**Award Date:** 06/22/2023
**Award Period of Performance:** Start Date: 07/01/2023 End Date: 06/30/2026
**Project Title:** Warm Pliocene mid-latitude upwelling sites, with implications to future southwestern North America aridity under climate change
**Managing Division Abbreviation:** OCE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-612 Paleo Perspectives on Present and Projected Climate
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $449,535
**Total Intended Award Amount:** $449,535
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $449,535
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov
**Phone:** (703) 292-4583

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Joseph Carlin
**Email:** jcarlin@nsf.gov
**Phone:** (703) 292-8562

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-612 Paleo Perspectives on Present and Projected Climate.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 2.04 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $58,307 |

| | |
|---|---|
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $135,622 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $193,929 |
| **C. Fringe Benefits** | $12,886 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $206,815 |
| **D. Equipment** | $5,000 |
| **E. Travel** | |
| Domestic | $13,503 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |

| | |
|---|---|
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $15,000 |
| Consultant Services | $0 |
| Computer Services | $9,000 |
| Subawards | $0 |
| Other | $28,188 |
| *Total Other Direct Costs (G)* | $52,188 |
| **H. Total Direct Costs (A Through G)** | **$277,506** |
| **I. Indirect Costs*** | **$172,029** |
| **J. Total Direct and Indirect Costs (H + I)** | $449,535 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$449,535** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| F&A | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2303681
**Managing Division Abbreviation:** TI **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/08/2023
**Amendment Number:** 000
**Proposal Number:** 2303681
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 04/14/2023, and email dated 06/07/2023.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

Funds provided by this award include support for "Research Experiences for Undergraduates" in accordance with the NSF program solicitation NSF 22-601.

## AWARD INFORMATION

**Award Number (FAIN):** 2303681
**Award Instrument:** Standard Grant
**Award Date:** 08/08/2023
**Award Period of Performance:** Start Date: 08/15/2023 End Date: 07/31/2025
**Project Title:** POSE: Phase II: Building the Differential Privacy Ecosystem through OpenDP
**Managing Division Abbreviation:** TI
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-572 Pathways to Enable Open-Source Ecosystems
**Assistance Listing Number(s) and Name(s):** 47.084 NSF Technology, Innovation and Partnerships (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $1,500,000
**Total Intended Award Amount:** $1,500,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,500,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| | | |
|---|---|---|
| **Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Austin Torretti
**Email:** atorrett@nsf.gov
**Phone:** (703) 292-4371

**Awarding Official**
**Name:** Willis Phan
**Email:** wiphan@nsf.gov

**Managing Program Officer**
**Name:** Peter S. Atherton
**Email:** patherto@nsf.gov
**Phone:** (703) 292-8772

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-572 Pathways to Enable Open-Source Ecosystems.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 6.00 |
| Senior Personnel Calendar Months | 3.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $91,461 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 14.00 |
| Other Professionals Calendar Months | 58.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $471,925 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $5,110 |
| **Undergraduate Students** | |

| | |
|---|---|
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 2.00 |
| Secretarial - Clerical Amount | $34,414 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $602,910 |
| **C. Fringe Benefits** | $202,948 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $805,858 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $20,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $28,800 |
| Participant Support Costs Travel | $2,400 |
| Participant Support Costs Subsistence | $22,400 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 108.00 |
| *Total Participant Costs (F)* | $53,600 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $30,000 |
| *Total Other Direct Costs (G)* | $30,000 |
| **H. Total Direct Costs (A Through G)** | **$909,458** |
| **I. Indirect Costs*** | **$590,542** |
| **J. Total Direct and Indirect Costs (H + I)** | $1,500,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$1,500,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Indirect Costs (IDC/F&A) | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2303681
**Managing Division Abbreviation:** TI **Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Supplement
**Amendment Date:** 03/28/2024
**Amendment Number:** 001
**Proposal Number:** 2422994
**Amendment Description:**

The purpose of this amendment is to:

- Add supplemental support to the award in the amount shown below in the Funding Information section.

This award is subject to the provisions of NSF 24-047, NSF Innovation Corps (I-Corps™) Training for Pathways to Enable Open-Source Ecosystems (POSE) Phase II Recipients), Dear Colleague Letter.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2303681
**Award Instrument:** Standard Grant
**Award Date:** 08/08/2023
**Award Period of Performance:** Start Date: 08/15/2023 End Date: 07/31/2025
**Project Title:** POSE: Phase II: Building the Differential Privacy Ecosystem through OpenDP
**Managing Division Abbreviation:** TI
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-572 Pathways to Enable Open-Source Ecosystems
**Assistance Listing Number(s) and Name(s):** 47.084 NSF Technology, Innovation and Partnerships
(See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $20,000
**Total Intended Award Amount:** $1,500,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,520,000

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Austin Torretti
**Email:** atorrett@nsf.gov
**Phone:** (703) 292-4371

**Awarding Official**
**Name:** Austin Torretti
**Email:** atorrett@nsf.gov

**Managing Program Officer**
**Name:** Peter S. Atherton
**Email:** patherto@nsf.gov
**Phone:** (703) 292-8772

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar | 0.00 |

| | |
|---|---|
| Months | |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 2.00 |
| Other Professionals Calendar Months | 1.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $4,973 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $4,973 |
| **C. Fringe Benefits** | $1,655 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $6,628 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |

| | |
|---|---|
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $5,206 |
| *Total Other Direct Costs (G)* | $5,206 |
| **H. Total Direct Costs (A Through G)** | **$11,834** |
| **I. Indirect Costs*** | **$8,166** |
| **J. Total Direct and Indirect Costs (H + I)** | $20,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$20,000** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2303835
**Managing Division Abbreviation:** DEB **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 05/07/2024
**Amendment Number:** 000
**Proposal Number:** 2303835
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 02/15/2024.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

It is the grantee's responsibility to ensure that any vertebrate animal work conducted under this award has Institutional Animal Care and Use Committee (IACUC) approval, where required, that the approval be from an organization that has a current Public Health Service-approved Animal Welfare Assurance, and that such approval remains valid at all times that vertebrate animal work is conducted under the award. See the NSF PAPPG Chapter II.D.4, for additional information. This condition extends to vertebrate animal work funded via use of a subaward. Failure to comply with this condition will result in suspension and/or termination of the award.

## AWARD INFORMATION

**Award Number (FAIN):** 2303835
**Award Instrument:** Continuing Grant

**Award Date:** 05/07/2024
**Award Period of Performance:** Start Date: 05/01/2024 End Date: 04/30/2028
**Project Title:** Collaborative Research: Feedbacks among Ecosystem Engineers and their Influence on Ecosystem Functioning
**Managing Division Abbreviation:** DEB
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-541 Division of Environmental Biology (core programs)
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $272,752
**Total Intended Award Amount:** $1,199,994
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $272,752
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $304,257 |
| 2026 | $622,985 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2303835 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2303836 | N | [redacted] | Trustees of Princeton University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Jeremy Wojdak
**Email:** jwojdak@nsf.gov
**Phone:** (703) 292-8781

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-541 Division of Environmental Biology (core programs).

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $12,566 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |

| | |
|---|---|
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $12,566 |
| **C. Fringe Benefits** | $2,777 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $15,343 |
| **D. Equipment** | $26,667 |
| **E. Travel** | |
| Domestic | $0 |
| International | $14,866 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $1,600 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 50.00 |
| *Total Participant Costs (F)* | $1,600 |
| **G. Other Direct Costs** | |
| Materials Supplies | $89,627 |
| Publication Costs | $0 |
| Consultant Services | $63,340 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $10,860 |
| *Total Other Direct Costs (G)* | $163,827 |
| **H. Total Direct Costs (A Through G)** | **$222,303** |

| | |
|---|---|
| **I. Indirect Costs*** | **$50,449** |
| **J. Total Direct and Indirect Costs (H + I)** | $272,752 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$272,752** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 26.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2303835

**Managing Division Abbreviation:** DEB

**Amendment Number:** 002

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Other Admin No Fund Actions
**Amendment Date:** 02/20/2025
**Amendment Number:** 002
**Proposal Number:** Not Applicable
**Amendment Description:**

The purpose of this amendment is to authorize the awardee to enter into the proposed subaward agreement in accordance with the Subawarding, Transferring or Contracting Out Part of an NSF Award request submitted on 02/04/2025.

The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

Except as modified by this amendment, the award conditions remain unchanged.

## PROJECT PERSONNEL

| Principal Investigator: | Email: | Organization: |
|---|---|---|
| [redacted] | [redacted] | PRESIDENT AND FELLOWS OF HARVARD COLLEGE |

## NSF CONTACT INFORMATION

| Managing Grants Official | Awarding Official | Managing Program Officer |
|---|---|---|
| (Primary Contact) | **Name:** Sharon D. Glivens | **Name:** Jeremy M Wojdak |
| **Name:** Sharon D. Glivens | **Email:** sglivens@nsf.gov | |

**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Email:** jwojdak@nsf.gov
**Phone:** (703) 292-8781

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2303983
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 04/03/2023
**Amendment Number:** 000
**Proposal Number:** 2303983
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 03/15/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2303983
**Award Instrument:** Standard Grant
**Award Date:** 04/03/2023
**Award Period of Performance:** Start Date: 07/01/2023 End Date: 06/30/2025
**Project Title:** SHF:Small: Extensible Models and Proofs via Family Polymorphism
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-631 Computer and Information Science and Engineering (CISE): Core Programs
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $396,914
**Total Intended Award Amount:** $396,914
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $396,914
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Damian Dechev
**Email:** ddechev@nsf.gov
**Phone:** (703) 292-8910

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-631 Computer and Information Science and Engineering (CISE): Core Programs.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 2.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $30,132 |

| | |
|---|---|
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $154,638 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $184,770 |
| **C. Fringe Benefits** | $6,478 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $191,248 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $9,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |

| | |
|---|---|
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $58,494 |
| *Total Other Direct Costs (G)* | $58,494 |
| **H. Total Direct Costs (A Through G)** | **$258,742** |
| **I. Indirect Costs*** | **$138,172** |
| **J. Total Direct and Indirect Costs (H + I)** | $396,914 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$396,914** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Modified Total Direct Costs | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2304877
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/17/2023
**Amendment Number:** 000
**Proposal Number:** 2304877
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/12/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2304877
**Award Instrument:** Standard Grant
**Award Date:** 07/17/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** Instanton homology in low-dimensional topology
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 22-1265 Geometric Analysis
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $400,000

**Total Intended Award Amount:** $400,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $400,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Swatee Naik
**Email:** snaik@nsf.gov
**Phone:** (703) 292-4876

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 3.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $81,714 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |

| | |
|---|---|
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 6.00 |
| Graduate Students Amount | $137,404 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $219,118 |
| **C. Fringe Benefits** | $17,568 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $236,686 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |

| G. Other Direct Costs | |
|---|---|
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$236,686** |
| **I. Indirect Costs*** | **$163,314** |
| **J. Total Direct and Indirect Costs (H + I)** | $400,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$400,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2305257
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/17/2023
**Amendment Number:** 000
**Proposal Number:** 2305257
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2305257
**Award Instrument:** Standard Grant
**Award Date:** 07/17/2023
**Award Period of Performance:** Start Date: 08/01/2023 End Date: 07/31/2026
**Project Title:** Fukaya categories of complex symplectic manifolds
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 22-1267 Topology
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $194,865

**Total Intended Award Amount:** $194,865
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $194,865
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Swatee Naik
**Email:** snaik@nsf.gov
**Phone:** (703) 292-4876

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 6.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $61,762 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |

| | |
|---|---|
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $61,762 |
| **C. Fringe Benefits** | $13,650 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $75,412 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $10,200 |
| International | $30,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |

| | |
|---|---|
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$115,612** |
| **I. Indirect Costs*** | **$79,253** |
| **J. Total Direct and Indirect Costs (H + I)** | $194,865 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$194,865** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2305257

**Managing Division Abbreviation:** DMS

**Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Other Admin No Fund Actions
**Amendment Date:** 09/12/2023
**Amendment Number:** 001
**Proposal Number:** Not Applicable
**Amendment Description:**

The purpose of this amendment is to change the PI or co-PI in accordance with the Change PI and Add/Change Co-PI request submitted on 09/11/2023. Effective with this amendment, the project is now under the direction of [redacted]

Except as modified by this amendment, the award conditions remain unchanged.

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Aprile N Roberson
**Email:** aroberso@nsf.gov

**Managing Program Officer**
**Name:** Swatee Naik
**Email:** snaik@nsf.gov
**Phone:** (703) 292-4876

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2305373
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/14/2023
**Amendment Number:** 000
**Proposal Number:** 2305373
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/28/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2305373
**Award Instrument:** Standard Grant
**Award Date:** 08/14/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** Applications of homotopy theory to algebraic geometry and physics
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 22-1267 Topology
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $550,000

**Total Intended Award Amount:** $550,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $550,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Christopher W. Stark
**Email:** cstark@nsf.gov
**Phone:** (703) 292-4869

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 3.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $116,094 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 12.00 |
| Graduate Students Amount | $139,390 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $255,484 |
| **C. Fringe Benefits** | $24,960 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $280,444 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $15,000 |
| International | $30,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$325,444** |
| **I. Indirect Costs*** | **$224,556** |
| **J. Total Direct and Indirect Costs (H + I)** | $550,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$550,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2306149
**Managing Division Abbreviation:** BCS **Amendment Number:** 000

## ORIGINAL AWARD INFORMATION

**Recipient (Legal Business Name):** UNIVERSITY OF DELAWARE
**Recipient Address:** 220 HULLIHEN HALL NEWARK, DE 19716-0099
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** T72NHKM259N3

**Award Number (FAIN):** 2018003
**Award Period of Performance:** Start Date: 09/01/2020 End Date: 02/29/2024
**Revised End Date:** 12/31/2022

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** PI Transfer
**Amendment Date:** 11/16/2022
**Amendment Number:** 000
**Proposal Number:** 2306149
**Amendment Description:**

The award transfer referenced in this notice has been approved by NSF. Acceptance of this transfer award constitutes the recipient organization's agreement to assume responsibility for completion of the project effort and to administer the award from the agreed upon transfer date, noted on the NSF Grant Transfer Request, to completion of the project in accordance with any award-specific terms and conditions and the general terms and conditions contained in this notice.

Incentive payments or gifts to participants must be made in accordance with written institutional policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

The Foundation authorizes the awardee to enter into the proposed subaward arrangement. The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in

effect at the time of this award amendment, and contain any special conditions included in this award.

## AWARD INFORMATION

**Award Number (FAIN):** 2306149
**Award Instrument:** Standard Grant
**Award Date:** 11/16/2022
**Award Period of Performance:** Start Date: 10/01/2022 End Date: 05/31/2024
**Project Title:** Speech and Communicative Timing Across Languages and Linguistic Contexts
**Managing Division Abbreviation:** BCS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 98-1311 Linguistics
**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $285,556
**Total Intended Award Amount:** $389,254
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $285,556

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email** [redacted]

**Organization:** UNIVERSITY OF DELAWARE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov
**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov

**Managing Program Officer**
**Name:** Jorge Valdes Kroff
**Email:** jvaldesk@nsf.gov
**Phone:** (703) 292-7920

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement

which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 2.00 |
| Senior Personnel Amount | $27,777 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 14.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $73,168 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 1.00 |
| Undergraduate Students Amount | $3,600 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 1.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |

| | |
|---|---|
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $104,545 |
| **C. Fringe Benefits** | $25,007 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $129,552 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $5,368 |
| International | $26,500 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $10,042 |
| Computer Services | $0 |
| Subawards | $49,514 |
| Other | $10,713 |
| *Total Other Direct Costs (G)* | $70,269 |
| **H. Total Direct Costs (A Through G)** | **$231,689** |
| **I. Indirect Costs*** | **$53,866** |
| **J. Total Direct and Indirect Costs (H + I)** | $285,555 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$285,555** |
| **M. Cost Sharing Proposed Level** | $0 |

Total Amount of Request

The **Total Amount of Request** (Budget Line L) may differ from the **Amount Obligated by this Amendment** (Funding Information section) due to rounding. The **Amount Obligated by this Amendment** is the amount obligated in the NSF financial system for this award.

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 26.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2306149
**Managing Division Abbreviation:** BCS **Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Supplement
**Amendment Date:** 04/11/2024
**Amendment Number:** 001
**Proposal Number:** 2420376
**Amendment Description:**

The purpose of this amendment is to:

- Add supplemental support to the award in the amount shown below in the Funding Information section.

Except as modified by this amendment, the award conditions remain unchanged.

It is the grantee's responsibility to ensure that any human subjects work conducted under this award has an Institutional Review Board (IRB) approval, where required, and that such approval remains valid at all times that human subjects work is conducted under the award. Failure to comply with this condition will result in suspension and/or termination of the award.

## AWARD INFORMATION

**Award Number (FAIN):** 2306149
**Award Instrument:** Standard Grant
**Award Date:** 11/16/2022
**Award Period of Performance:** Start Date: 10/01/2022 End Date: 05/31/2025
**Project Title:** Speech and Communicative Timing Across Languages and Linguistic Contexts
**Managing Division Abbreviation:** BCS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 98-1311 Linguistics

**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $41,463
**Total Intended Award Amount:** $389,254
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $327,019

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov
**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Jorge Valdes Kroff
**Email:** jvaldesk@nsf.gov
**Phone:** (703) 292-7920

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |

| | |
|---|---|
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 5.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $27,084 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $27,084 |
| **C. Fringe Benefits** | $5,823 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $32,907 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |

| | |
|---|---|
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$32,907** |
| **I. Indirect Costs*** | **$8,556** |
| **J. Total Direct and Indirect Costs (H + I)** | $41,463 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$41,463** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2308043
**Managing Division Abbreviation:** AST **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/07/2023
**Amendment Number:** 000
**Proposal Number:** 2308043
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2308043
**Award Instrument:** Standard Grant
**Award Date:** 08/07/2023
**Award Period of Performance:** Start Date: 08/15/2023 End Date: 07/31/2026
**Project Title:** The Tierras Observatory: An Ultra-precise Time-series Photometer to Characterize Nearby Low-mass Stars and Their Terrestrial Exoplanets
**Managing Division Abbreviation:** AST
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-624 Astronomy and Astrophysics Research Grants
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $537,856
**Total Intended Award Amount:** $537,856
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $537,856
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov

**Managing Program Officer**
**Name:** Martin D. Still
**Email:** mstill@nsf.gov
**Phone:** (703) 292-4290

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-624 Astronomy and Astrophysics Research Grants.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 3.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |

| | |
|---|---|
| Senior Personnel Amount | $78,240 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 3.00 |
| Post Doctoral Calendar Months | 18.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $101,452 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $45,140 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $224,832 |
| **C. Fringe Benefits** | $42,959 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $267,791 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $19,790 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |

| | |
|---|---|
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $15,000 |
| Publication Costs | $7,797 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $13,317 |
| *Total Other Direct Costs (G)* | $36,114 |
| **H. Total Direct Costs (A Through G)** | **$323,695** |
| **I. Indirect Costs*** | **$214,161** |
| **J. Total Direct and Indirect Costs (H + I)** | $537,856 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$537,856** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2308272
**Managing Division Abbreviation:** OCE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/19/2023
**Amendment Number:** 000
**Proposal Number:** 2308272
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

## AWARD INFORMATION

**Award Number (FAIN):** 2308272
**Award Instrument:** Standard Grant
**Award Date:** 07/19/2023
**Award Period of Performance:** Start Date: 10/01/2023 End Date: 09/30/2025
**Project Title:** Postdoctoral Fellowship: OCE-PRF: Reconstructing CO2 Levels for the Late Cretaceous through Paleocene using Sedimentary Compositions of Molecular and Isotopic Proxies
**Managing Division Abbreviation:** OCE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-628 Ocean Sciences Postdoctoral Research Fellowships
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for

SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $333,652
**Total Intended Award Amount:** $333,652
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $333,652
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov
**Phone:** (703) 292-4583

**Awarding Official**
**Name:** Staci Jenkins
**Email:** sjenkins@nsf.gov

**Managing Program Officer**
**Name:** Timothy J Crone
**Email:** tjcrone@nsf.gov
**Phone:** (703) 292-4344

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-628 Ocean Sciences Postdoctoral Research Fellowships.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 24.00 |

| | |
|---|---|
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $137,800 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $137,800 |
| **C. Fringe Benefits** | $29,627 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $167,427 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $5,350 |
| International | $3,500 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |

| | |
|---|---|
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $19,050 |
| Publication Costs | $1,600 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $500 |
| *Total Other Direct Costs (G)* | $21,150 |
| **H. Total Direct Costs (A Through G)** | **$197,427** |
| **I. Indirect Costs*** | **$136,225** |
| **J. Total Direct and Indirect Costs (H + I)** | $333,652 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$333,652** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2309041
**Managing Division Abbreviation:** IIS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 09/14/2023
**Amendment Number:** 000
**Proposal Number:** 2309041
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 08/02/2023.

It is the grantee's responsibility to ensure that any human subjects work conducted under this award has an Institutional Review Board (IRB) approval, where required, and that such approval remains valid at all times that human subjects work is conducted under the award. Failure to comply with this condition will result in suspension and/or termination of the award.

Incentive payments or gifts to participants must be made in accordance with written institutional policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

Attribution of support in publications resulting from this project must acknowledge the NSF/NIH/DOE/AEI/ANR/BMBF/BSF/ISCIII/NICT joint program, as well as the funding agency and award number, by including a phrase such as, "as part of the NSF/NIH/DOE/AEI/ANR/BMBF/BSF/ISCIII/NICT Collaborative Research in Computational Neuroscience Program.

## AWARD INFORMATION

**Award Number (FAIN):** 2309041

**Award Instrument:** Continuing Grant
**Award Date:** 09/14/2023
**Award Period of Performance:** Start Date: 10/01/2023 End Date: 09/30/2026
**Project Title:** CRCNS Research Proposal: Learning by Looking: Modeling visual system representation formation via foveated sensing in a 3-D world
**Managing Division Abbreviation:** IIS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 20-609 Collaborative Research in Computational Neuroscience
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $1,031,036
**Total Intended Award Amount:** $1,189,997
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,031,036
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $158,961 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov
**Phone:** (703) 292-7859

**Awarding Official**
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov

**Managing Program Officer**
**Name:** Kenneth C. Whang
**Email:** kwhang@nsf.gov
**Phone:** (703) 292-5149

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 20-609 Collaborative Research in Computational Neuroscience.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 6.00 |
| Senior Personnel Calendar Months | 1.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $60,359 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 4.00 |
| Post Doctoral Calendar Months | 36.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $271,119 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $87,358 |
| **Undergraduate Students** | |

| | |
|---|---|
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $418,836 |
| **C. Fringe Benefits** | $71,268 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $490,104 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $21,422 |
| International | $12,948 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $13,478 |
| Publication Costs | $7,948 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $83,913 |
| *Total Other Direct Costs (G)* | $105,339 |
| **H. Total Direct Costs (A Through G)** | **$629,813** |
| **I. Indirect Costs*** | **$401,223** |
| **J. Total Direct and Indirect Costs (H + I)** | $1,031,036 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$1,031,036** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

**From:** kwhang@nsf.gov
**Reply To:** kwhang@nsf.gov
**To:** [redacted]
**CC:** kwhang@nsf.gov; swolley@nsf.gov
**Subject:** NSF Approval of Continuing Grant Increment - Award ID - 2309041
**Status:** Sent on Sun 07/21/2024 02:06 PM

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Notification of NSF Approval of Additional Funding Support

Award No. 2309041
Amendment No. 001
Division Identifier: IIS
Release Date: 07/21/2024
Released By: Kenneth Whang
Amount: $158,961
Award End Date: 09/30/2026

As authorized by the original award, the National Science Foundation hereby releases $158,961 for additional support of the award referenced above. The award, with this amendment, now totals $1,189,997 and will end on 09/30/2026.

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org_NSF_.

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Kenneth Whang , kwhang@nsf.gov, (703)292-5149.

Any award specific questions of an administrative or financial nature should be addressed to the grants official at http://www.nsf.gov/bfa/dga/docs/liaison.pdf. The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2310050
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/19/2023
**Amendment Number:** 000
**Proposal Number:** 2310050
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 06/20/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2310050
**Award Instrument:** Standard Grant
**Award Date:** 07/19/2023
**Award Period of Performance:** Start Date: 08/01/2023 End Date: 07/31/2026
**Project Title:** Collaborative Research: Beyond Standard Model Searches Using the IceCube Neutrino Telescope
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-593 Division of Physics: Investigator-Initiated Research Projects
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting), 47.078 Polar Programs

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $100,000
**Total Intended Award Amount:** $100,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $100,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2310050 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2310051 | N | [redacted] | Massachusetts Institute of Technology |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** William Wester
**Email:** wwester@nsf.gov
**Phone:** (703) 292-4677

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $44,540 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $44,540 |

| | |
|---|---|
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $44,540 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $2,865 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $19,886 |
| *Total Other Direct Costs (G)* | $19,886 |
| **H. Total Direct Costs (A Through G)** | **$67,291** |
| **I. Indirect Costs*** | **$32,709** |
| **J. Total Direct and Indirect Costs (H + I)** | $100,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$100,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC On-Campus | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2310717
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Renewal
**Amendment Date:** 08/01/2023
**Amendment Number:** 000
**Proposal Number:** 2310717
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/12/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2310717
**Award Instrument:** Standard Grant
**Award Date:** 08/01/2023
**Award Period of Performance:** Start Date: 08/01/2023 End Date: 07/31/2026
**Project Title:** New and Refurbished Directions Beyond the Standard Model
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-593 Division of Physics: Investigator-Initiated Research Projects
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $300,000

**Total Intended Award Amount:** $300,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $300,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Keith Dienes
**Email:** kdienes@nsf.gov
**Phone:** (703) 292-5314

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 3.00 |
| Post Doctoral Calendar Months | 25.40 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $141,671 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $141,671 |
| **C. Fringe Benefits** | $35,843 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $177,514 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $1 |
| *Total Other Direct Costs (G)* | $1 |
| **H. Total Direct Costs (A Through G)** | **$177,515** |
| **I. Indirect Costs*** | **$122,485** |
| **J. Total Direct and Indirect Costs (H + I)** | $300,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$300,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2310908

**Managing Division Abbreviation:** RISE

**Amendment Number:** 003

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Other Admin No Fund Actions
**Amendment Date:** 02/20/2025
**Amendment Number:** 003
**Proposal Number:** Not Applicable
**Amendment Description:**

The purpose of this amendment is to change the PI or co-PI in accordance with the Withdrawal of PI/Co-PI request submitted on 02/14/2025. Effective with this amendment, the project is now under the direction of [redacted]

Except as modified by this amendment, the award conditions remain unchanged.

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Awarding Official**
**Name:** Shirley R. Kerchner
**Email:** skerchne@nsf.gov

**Managing Program Officer**
**Name:** Maria L Uhle
**Email:** muhle@nsf.gov
**Phone:** (703) 292-2250

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2310908
**Managing Division Abbreviation:** RISE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 05/17/2023
**Amendment Number:** 000
**Proposal Number:** 2310908
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

No work with human subjects, including recruitment, may be conducted under this protocol or grant until IRB approval has been obtained.

## AWARD INFORMATION

**Award Number (FAIN):** 2310908
**Award Instrument:** Continuing Grant
**Award Date:** 05/17/2023
**Award Period of Performance:** Start Date: 05/15/2023 End Date: 04/30/2026
**Project Title:** Belmont Forum Collaborative Research: Climate-Induced Migration in Africa and Beyond: Big Data and Predictive Analytics
**Managing Division Abbreviation:** RISE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-1 Proposal & Award Policies & Procedures Guide - PAPPG
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $149,891
**Total Intended Award Amount:** $450,001
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $149,891
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $138,999 |
| 2025 | $161,111 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Maria L Uhle
**Email:** muhle@nsf.gov
**Phone:** (703) 292-2250

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 0.70 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $13,047 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 2.00 |
| Other Professionals Calendar Months | 5.65 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $48,447 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $61,494 |
| **C. Fringe Benefits** | $21,229 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $82,723 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |

| | |
|---|---|
| International | $3,970 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $2,000 |
| *Total Other Direct Costs (G)* | $2,000 |
| **H. Total Direct Costs (A Through G)** | **$88,693** |
| **I. Indirect Costs*** | **$61,198** |
| **J. Total Direct and Indirect Costs (H + I)** | $149,891 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$149,891** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2312667
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/30/2023
**Amendment Number:** 000
**Proposal Number:** 2312667
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Fiscal Year 2023 and 2024 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

## AWARD INFORMATION

**Award Number (FAIN):** 2312667
**Award Instrument:** Continuing Grant
**Award Date:** 08/30/2023
**Award Period of Performance:** Start Date: 10/01/2023 End Date: 09/30/2027
**Project Title:** Collaborative Research: CIF: Medium: Fundamental Limits of Privacy-Enhancing Technologies
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-631 Computer and Information Science and Engineering (CISE): Core Programs
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $225,441
**Total Intended Award Amount:** $425,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $225,441
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $101,566 |
| 2026 | $97,993 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2312666 | Y | [redacted] | Arizona Board of Regents Arizona State University |
| 2312667 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov
**Phone:** (703) 292-8709

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Alfred Hero
**Email:** ahero@nsf.gov
**Phone:**

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended

(42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-631 Computer and Information Science and Engineering (CISE): Core Programs.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 2.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $29,352 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $78,329 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |

| | |
|---|---|
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $107,681 |
| **C. Fringe Benefits** | $6,486 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $114,167 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $32,499 |
| *Total Other Direct Costs (G)* | $32,499 |
| **H. Total Direct Costs (A Through G)** | **$146,666** |
| **I. Indirect Costs*** | **$78,775** |
| **J. Total Direct and Indirect Costs (H + I)** | $225,441 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$225,441** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Total Modified Direct Costs | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2313084
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 06/23/2023
**Amendment Number:** 000
**Proposal Number:** 2313084
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2313084
**Award Instrument:** Standard Grant
**Award Date:** 06/23/2023
**Award Period of Performance:** Start Date: 07/01/2023 End Date: 06/30/2026
**Project Title:** Collaborative Research: FET: Medium: Efficient Compilation for Dynamically Reconfigurable Atom Arrays
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-631 Computer and Information Science and Engineering (CISE): Core Programs
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $450,000
**Total Intended Award Amount:** $450,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $450,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| **Principal Investigator:** | **Email:** | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
|---|---|---|
| [redacted] | [redacted] | |

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2313083 | Y | [redacted] | University of California, Los Angeles |
| 2313084 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Almadena Y. Chtchelkanova
**Email:** achtchel@nsf.gov
**Phone:** (703) 292-7498

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-631 Computer and Information Science and Engineering (CISE): Core Programs.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 6.00 |
| Graduate Students Amount | $203,885 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $203,885 |

| | |
|---|---|
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $203,885 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $8,638 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $90,837 |
| *Total Other Direct Costs (G)* | $99,475 |
| **H. Total Direct Costs (A Through G)** | **$303,360** |
| **I. Indirect Costs*** | **$146,640** |
| **J. Total Direct and Indirect Costs (H + I)** | $450,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$450,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC Base | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2315488
**Managing Division Abbreviation:** SES **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 06/26/2023
**Amendment Number:** 000
**Proposal Number:** 2315488
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 05/25/2023.

It is the grantee's responsibility to ensure that any human subjects work conducted under this award has an Institutional Review Board (IRB) approval, where required, and that such approval remains valid at all times that human subjects work is conducted under the award. Failure to comply with this condition will result in suspension and/or termination of the award.

The Foundation authorizes the awardee to enter into the proposed subaward arrangement. The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

## AWARD INFORMATION

**Award Number (FAIN):** 2315488
**Award Instrument:** Standard Grant
**Award Date:** 06/26/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** Outsourcing Property Tax Re-Assessments: Empirical Evaluation
**Managing Division Abbreviation:** SES

**Research and Development Award:** Yes
**Funding Opportunity:** PD 98-1320 Economics
**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $362,153
**Total Intended Award Amount:** $362,153
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $362,153
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| | | |
|---|---|---|
| **Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** NATIONAL BUREAU OF ECONOMIC RESEARCH INC |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** MASSACHUSETTS INSTITUTE OF TECHNOLOGY |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov
**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Kwabena Gyimah-Brempong
**Email:** kgyimahb@nsf.gov
**Phone:** (703) 292-7466

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $21,661 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 6.00 |
| Other Professionals Calendar Months | 5.07 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $33,267 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $33,850 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $88,778 |
| **C. Fringe Benefits** | $16,535 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $105,313 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $0 |
| International | $14,795 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $2,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $138,541 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $140,541 |
| **H. Total Direct Costs (A Through G)** | **$260,649** |
| **I. Indirect Costs*** | **$101,504** |
| **J. Total Direct and Indirect Costs (H + I)** | $362,153 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$362,153** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Harvard University F&A Rate for FY23 is 69% | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2315533
**Managing Division Abbreviation:** SES **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/11/2023
**Amendment Number:** 000
**Proposal Number:** 2315533
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/21/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2315533
**Award Instrument:** Standard Grant
**Award Date:** 08/11/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** Collaborative Research: The Economics of Port Infrastructure
**Managing Division Abbreviation:** SES
**Research and Development Award:** Yes
**Funding Opportunity:** PD 98-1320 Economics
**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $283,999

**Total Intended Award Amount:** $283,999
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $283,999
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2315533 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2315534 | N | [redacted] | New York University |
| 2315535 | N | [redacted] | Boston College |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov
**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov

**Managing Program Officer**
**Name:** Nancy A Lutz
**Email:** nlutz@nsf.gov
**Phone:** (703) 292-7280

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 4.38 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $110,327 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $34,000 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $144,327 |
| **C. Fringe Benefits** | $23,720 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $168,047 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$168,047** |
| **I. Indirect Costs*** | **$115,952** |
| **J. Total Direct and Indirect Costs (H + I)** | $283,999 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$283,999** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| IDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2320265
**Managing Division Abbreviation:** ECCS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/17/2023
**Amendment Number:** 000
**Proposal Number:** 2320265
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/07/2023.

The grantee may allow access to the instrumentation to non-Federal outside organizations for a fee, if excess time is available on the equipment. However, the grantee shall not use this equipment to provide services to such organizations for a fee that is less than private companies charge for equivalent services. In addition, the users as outlined in the proposal must have the highest priority when allocating instrument access time.

## AWARD INFORMATION

**Award Number (FAIN):** 2320265
**Award Instrument:** Standard Grant
**Award Date:** 08/17/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** Equipment: MRI: Track #1 Acquisition of Photonic Wirebonding Tool for Quantum and Nanophotonics
**Managing Division Abbreviation:** ECCS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-519 Major Research Instrumentation Program:

**Assistance Listing Number(s) and Name(s):** 47.083 Office of Integrative Activities (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $999,420
**Total Intended Award Amount:** $999,420
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $999,420
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Daniel P McEnrue
**Email:** dpmcenru@nsf.gov
**Phone:** (703) 292-8386

**Awarding Official**
**Name:** Daniel P McEnrue
**Email:** dpmcenru@nsf.gov

**Managing Program Officer**
**Name:** Rosa Lukaszew
**Email:** rlukasze@nsf.gov
**Phone:** (703) 292-8103

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-519 Major Research Instrumentation Program:.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 6.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $800,000 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $12,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $106,000 |
| *Total Other Direct Costs (G)* | $118,000 |
| **H. Total Direct Costs (A Through G)** | **$918,000** |
| **I. Indirect Costs*** | **$81,420** |
| **J. Total Direct and Indirect Costs (H + I)** | $999,420 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$999,420** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| F&A | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2321651
**Managing Division Abbreviation:** DEB **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/03/2023
**Amendment Number:** 000
**Proposal Number:** 2321651
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2321651
**Award Instrument:** Continuing Grant
**Award Date:** 08/03/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** Collaborative Research: Ideas Lab: Smarter Microbial Observatories for Realtime ExperimentS (SMORES)
**Managing Division Abbreviation:** DEB
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-617 Ideas Lab: Engineering Technologies to Advance Underwater Sciences
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting), 47.041 Engineering Grants, 47.074 Biological Sciences

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $446,353
**Total Intended Award Amount:** $595,184
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $446,353
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $50,000 |
| 2025 | $98,831 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2321651 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2321652 | N | [redacted] | Rochester Institute of Technology |
| 2321653 | N | [redacted] | Florida International University |
| 2321654 | N | [redacted] | University of Georgia Research Foundation, Inc. |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Francisco Bilbao Moore
**Email:** fbmoore@nsf.gov
**Phone:** (703) 292-5376

**Phone:** (703) 292-7837

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-617 Ideas Lab: Engineering Technologies to Advance Underwater Sciences.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $28,760 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 1.00 |
| Other Professionals Calendar Months | 2.40 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $22,278 |
| **Graduate Students** | |

| | |
|---|---|
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $16,511 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $67,549 |
| **C. Fringe Benefits** | $14,599 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $82,148 |
| **D. Equipment** | $290,112 |
| **E. Travel** | |
| Domestic | $2,943 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $7,358 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $7,358 |
| **H. Total Direct Costs (A Through G)** | **$382,561** |
| **I. Indirect Costs*** | **$63,792** |
| **J. Total Direct and Indirect Costs (H + I)** | $446,353 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$446,353** |

| M. Cost Sharing Proposed Level | $0 |
|---|---|

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2323102
**Managing Division Abbreviation:** OCE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/17/2023
**Amendment Number:** 000
**Proposal Number:** 2323102
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/13/2023. Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

## AWARD INFORMATION

**Award Number (FAIN):** 2323102
**Award Instrument:** Continuing Grant
**Award Date:** 08/17/2023
**Award Period of Performance:** Start Date: 01/01/2024 End Date: 12/31/2027
**Project Title:** Constructing a 1.5-million-year time series of magmatic and hydrothermal activity at the Juan de Fuca ridge
**Managing Division Abbreviation:** OCE
**Research and Development Award:** Yes
**Funding Opportunity:** PD 17-1620 Marine Geology and Geophysics
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for

SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $16,900
**Total Intended Award Amount:** $255,786
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $16,900
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $49,301 |
| 2025 | $109,169 |
| 2026 | $80,416 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov
**Phone:** (703) 292-4583

**Awarding Official**
**Name:** Staci Jenkins
**Email:** sjenkins@nsf.gov

**Managing Program Officer**
**Name:** Joseph Carlin
**Email:** jcarlin@nsf.gov
**Phone:** (703) 292-8562

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |

| | |
|---|---|
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $10,000 |
| *Total Other Direct Costs (G)* | $10,000 |
| **H. Total Direct Costs (A Through G)** | **$10,000** |
| **I. Indirect Costs*** | **$6,900** |
| **J. Total Direct and Indirect Costs (H + I)** | $16,900 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$16,900** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| 92922 | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2323970
**Managing Division Abbreviation:** DMR **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 09/15/2023
**Amendment Number:** 000
**Proposal Number:** 2323970
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2323970
**Award Instrument:** Standard Grant
**Award Date:** 09/15/2023
**Award Period of Performance:** Start Date: 10/01/2023 End Date: 09/30/2027
**Project Title:** Collaborative Research: DMREF: Discovery of unconventional superconductors by design
**Managing Division Abbreviation:** DMR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-530 Designing Materials to Revolutionize and Engineer our Future
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $1,500,000
**Total Intended Award Amount:** $1,500,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,500,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| | | |
|---|---|---|
| **Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2323970 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2323971 | N | [redacted] | Arizona Board of Regents Arizona State University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov

**Managing Program Officer**
**Name:** John A Schlueter
**Email:** jschluet@nsf.gov
**Phone:** (703) 292-7766

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-530 Designing Materials to Revolutionize and Engineer our Future.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 12.00 |
| Senior Personnel Calendar Months | 2.64 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $61,464 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 12.00 |
| Graduate Students Amount | $523,786 |
| **Undergraduate Students** | |

| | |
|---|---|
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $585,250 |
| **C. Fringe Benefits** | $13,584 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $598,834 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $10,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $96,813 |
| Publication Costs | $10,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $255,367 |
| *Total Other Direct Costs (G)* | $362,180 |
| **H. Total Direct Costs (A Through G)** | **$971,014** |
| **I. Indirect Costs*** | **$528,986** |
| **J. Total Direct and Indirect Costs (H + I)** | $1,500,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$1,500,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2324862
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 09/18/2023
**Amendment Number:** 000
**Proposal Number:** 2324862
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2324862
**Award Instrument:** Standard Grant
**Award Date:** 09/18/2023
**Award Period of Performance:** Start Date: 10/01/2023 End Date: 09/30/2027
**Project Title:** Collaborative Research: DESC: Type 2: Delphi: Life-time aware design frameworks for sustainable edge devices
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-532 Design for Environmental Sustainability in Computing
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $500,000
**Total Intended Award Amount:** $500,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $500,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| **Principal Investigator:** | **Email:** | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
|---|---|---|
| [redacted] | [redacted] | |

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2324860 | Y | [redacted] | Cornell University |
| 2324861 | N | [redacted] | GA Tech Research Corporation, GA Institute of Technology |
| 2324862 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov
**Phone:** (703) 292-8709

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Danella Zhao
**Email:** dzhao@nsf.gov
**Phone:** (703) 292-4434

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-532 Design for

Environmental Sustainability in Computing.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 4.00 |
| Senior Personnel Calendar Months | 0.40 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $7,988 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $184,884 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $192,872 |
| **C. Fringe Benefits** | $1,717 |

| | |
|---|---|
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $194,589 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $13,912 |
| International | $24,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $14,409 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $82,723 |
| *Total Other Direct Costs (G)* | $97,132 |
| **H. Total Direct Costs (A Through G)** | **$329,633** |
| **I. Indirect Costs*** | **$170,367** |
| **J. Total Direct and Indirect Costs (H + I)** | $500,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$500,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC On-Campus Research | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG)

Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2326605
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 05/22/2024
**Amendment Number:** 000
**Proposal Number:** 2326605
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 04/19/2024.

The term external site visitors means a committee of expertise-appropriate external researchers selected from relevant research community.

The term NSF Team means the managing PD for the project, the lead PD of Expeditions program and other NSF PDs with project relevant expertise.

1. Within one to three months after the award announcement, the PI Team must organize a one-day kick off meeting virtually/hybrid/in-person.

2. This Expeditions project will be merit reviewed with external site visitors in a site visit conducted near the end of Year 2 to assess project progress and to determine if the project warrants continued support in Years 3 through 5.

3. The project will be site visited as needed by a NSF team at the end of Year 1, Year 3, and Year 5 if external site visits were not recommended for those years by site visit report(s) from the external site visiting committee.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies

and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2326605
**Award Instrument:** Continuing Grant
**Award Date:** 05/22/2024
**Award Period of Performance:** Start Date: 06/01/2024 End Date: 05/31/2029
**Project Title:** Collaborative Research: National Science Foundation Expeditions in Computing: Carbon Connect -- An Ecosystem for Sustainable Computing
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 20-544 Expeditions in Computing
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $483,709
**Total Intended Award Amount:** $4,030,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $483,709
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $476,925 |
| 2026 | $1,015,072 |
| 2027 | $1,023,147 |
| 2028 | $1,031,147 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD

COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2326605 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2326606 | N | [redacted] | University of Pennsylvania |
| 2326607 | N | [redacted] | Yale University |
| 2326608 | N | [redacted] | Cornell University |
| 2326609 | N | [redacted] | California Institute of Technology |
| 2326610 | N | [redacted] | Carnegie Mellon University |
| 2326611 | N | [redacted] | Ohio State University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov
**Phone:** (703) 292-8709

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Mitra Basu
**Email:** mbasu@nsf.gov
**Phone:** (703) 292-8649

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 20-544 Expeditions in Computing.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 4.00 |
| Senior Personnel Calendar Months | 4.25 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $103,165 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $117,908 |
| **Undergraduate Students** | |

| | |
|---|---|
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $221,073 |
| **C. Fringe Benefits** | $22,181 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $243,254 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $7,500 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $55,400 |
| *Total Other Direct Costs (G)* | $55,400 |
| **H. Total Direct Costs (A Through G)** | **$306,154** |
| **I. Indirect Costs*** | **$177,555** |
| **J. Total Direct and Indirect Costs (H + I)** | $483,709 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$483,709** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2326605
**Managing Division Abbreviation:** CCF **Amendment Number:** 002

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Frwd Funded
**Amendment Date:** 08/19/2024
**Amendment Number:** 002
**Proposal Number:** 2437154
**Amendment Description:**

The purpose of this amendment is to forward fund scheduled incremental funding to the award in the amount shown below in the Funding Information section.

This amendment includes funds that were originally scheduled to be released in a future fiscal year. It is still the grantee's responsibility to submit an annual project report for each year in accordance with the NSF policies.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2326605
**Award Instrument:** Continuing Grant
**Award Date:** 05/22/2024
**Award Period of Performance:** Start Date: 06/01/2024 End Date: 05/31/2029
**Project Title:** Collaborative Research: National Science Foundation Expeditions in Computing: Carbon Connect -- An Ecosystem for Sustainable Computing
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 20-544 Expeditions in Computing
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $476,925
**Total Intended Award Amount:** $4,030,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,160,634

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov
**Phone:** (703) 292-8709

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Sankar Basu
**Email:** sabasu@nsf.gov
**Phone:** (703) 292-7843

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 4.00 |
| Senior Personnel Calendar Months | 4.25 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $106,279 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $111,646 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $217,925 |
| **C. Fringe Benefits** | $22,850 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $240,775 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $7,500 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $52,686 |
| *Total Other Direct Costs (G)* | $52,686 |
| **H. Total Direct Costs (A Through G)** | **$300,961** |
| **I. Indirect Costs*** | **$175,964** |
| **J. Total Direct and Indirect Costs (H + I)** | $476,925 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$476,925** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2326787
**Managing Division Abbreviation:** OMA **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/22/2023
**Amendment Number:** 000
**Proposal Number:** 2326787
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/13/2023.

The Foundation authorizes the awardee to enter into the proposed subaward arrangement. The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

Subawardee:

Massachusetts Institute of Technology

Fiscal Year 2024 and 2025 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

## AWARD INFORMATION

**Award Number (FAIN):** 2326787
**Award Instrument:** Continuing Grant
**Award Date:** 08/22/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** QuSeC-TAQS: Quantum Sensor Networks for Metrology, Chemistry and Astrophysics
**Managing Division Abbreviation:** OMA

**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-630 Quantum Sensing Challenges for Transformational Advances in Quantum Systems
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting), 47.079 Office of International Science and Engineering

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $1,175,295
**Total Intended Award Amount:** $1,750,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,175,295
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $574,705 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Aprile N Roberson
**Email:** aroberso@nsf.gov

**Managing Program Officer**
**Name:** Alexander Cronin
**Email:** acronin@nsf.gov
**Phone:** (703) 292-5302

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended

(42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-630 Quantum Sensing Challenges for Transformational Advances in Quantum Systems.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 8.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 4.00 |
| Post Doctoral Calendar Months | 32.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $178,194 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $89,481 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |

| | |
|---|---|
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $267,675 |
| **C. Fringe Benefits** | $38,312 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $305,987 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $22,500 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $4,017 |
| Publication Costs | $5,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $547,925 |
| Other | $39,739 |
| *Total Other Direct Costs (G)* | $596,681 |
| **H. Total Direct Costs (A Through G)** | **$925,168** |
| **I. Indirect Costs*** | **$250,127** |
| **J. Total Direct and Indirect Costs (H + I)** | $1,175,295 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$1,175,295** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2326787
**Managing Division Abbreviation:** OMA **Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Frwd Funded
**Amendment Date:** 09/20/2023
**Amendment Number:** 001
**Proposal Number:** 2348124
**Amendment Description:**

The purpose of this amendment is to forward fund scheduled incremental funding to the award in the amount shown below in the Funding Information section.

This amendment includes funds that were originally scheduled to be released in a future fiscal year. It is still the grantee's responsibility to submit an annual project report for each year in accordance with the NSF policies.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2326787
**Award Instrument:** Continuing Grant
**Award Date:** 08/22/2023
**Award Period of Performance:** Start Date: 09/01/2023 End Date: 08/31/2026
**Project Title:** QuSeC-TAQS: Quantum Sensor Networks for Metrology, Chemistry and Astrophysics
**Managing Division Abbreviation:** OMA
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-630 Quantum Sensing Challenges for Transformational Advances in Quantum Systems
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $574,705
**Total Intended Award Amount:** $1,750,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,750,000

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Alexander Cronin
**Email:** acronin@nsf.gov
**Phone:** (703) 292-5302

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 0.00 |
| Senior Personnel Calendar | 0.00 |

| | |
|---|---|
| Months | |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 200.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 14.50 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $84,330 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $46,764 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $131,094 |
| **C. Fringe Benefits** | $18,131 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $149,225 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $10,250 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs | $0 |

| | |
|---|---|
| Stipends | |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $1,118 |
| Publication Costs | $1,500 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $280,000 |
| Other | $20,768 |
| *Total Other Direct Costs (G)* | $303,386 |
| **H. Total Direct Costs (A Through G)** | **$462,861** |
| **I. Indirect Costs*** | **$111,844** |
| **J. Total Direct and Indirect Costs (H + I)** | $574,705 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$574,705** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2327447
**Managing Division Abbreviation:** DGE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 09/11/2023
**Amendment Number:** 000
**Proposal Number:** 2327447
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 06/23/2023, and email dated 06/19/2023 and cover sheet dated 06/23/2023.

It is the grantee's responsibility to ensure that any human subjects work conducted under this award has an Institutional Review Board (IRB) approval, where required, and that such approval remains valid at all times that human subjects work is conducted under the award. Failure to comply with this condition will result in suspension and/or termination of the award.

Incentive payments or gifts to participants must be made in accordance with written institutional policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

The indirect cost rate(s) for this award is 69%. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Please disregard the below section on *Indirect Cost Rates.

## AWARD INFORMATION

**Award Number (FAIN):** 2327447
**Award Instrument:** Standard Grant
**Award Date:** 09/11/2023
**Award Period of Performance:** Start Date: 09/15/2023 End Date: 08/31/2025
**Project Title:** When Teachers "Aren't There": Detecting, Evaluating, and Learning from Rote Teaching Across Development
**Managing Division Abbreviation:** DGE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-544 Science, Technology, Engineering and Mathematics (STEM) Education Individual Postdoctoral Research Fellowships
**Assistance Listing Number(s) and Name(s):** 47.076 Education and Human Resources (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $338,170
**Total Intended Award Amount:** $338,170
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $338,170
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Denise M. Martin
**Email:** dmartin@nsf.gov
**Phone:** (703) 292-4808

**Awarding Official**
**Name:** Denise M. Martin
**Email:** dmartin@nsf.gov

**Managing Program Officer**
**Name:** Eric Knuth
**Email:** eknuth@nsf.gov
**Phone:**

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-544 Science, Technology, Engineering and Mathematics (STEM) Education Individual Postdoctoral Research Fellowships.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 24.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $140,000 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 4.00 |
| Undergraduate Students Amount | $14,572 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |

| | |
|---|---|
| *Total Salaries and Wages (A+B)* | $154,572 |
| **C. Fringe Benefits** | $31,528 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $186,100 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $8,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $6,000 |
| *Total Other Direct Costs (G)* | $6,000 |
| **H. Total Direct Costs (A Through G)** | **$200,100** |
| **I. Indirect Costs*** | **$138,070** |
| **J. Total Direct and Indirect Costs (H + I)** | $338,170 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$338,170** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2331228
**Managing Division Abbreviation:** IOS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/04/2023
**Amendment Number:** 000
**Proposal Number:** 2331228
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by email dated 07/27/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2331228
**Award Instrument:** Continuing Grant
**Award Date:** 08/04/2023
**Award Period of Performance:** Start Date: 08/15/2023 End Date: 07/31/2025
**Project Title:** EAGER: Identifying the genetic determinants of plasmid-dependent phage host range
**Managing Division Abbreviation:** IOS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-1 Proposal & Award Policies & Procedures Guide - PAPPG
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $150,000

**Total Intended Award Amount:** $300,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $150,000
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2024 | $150,000 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov
**Phone:** (703) 292-4839

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Mamta Rawat
**Email:** mrawat@nsf.gov
**Phone:** (703) 292-7265

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.20 |
| Senior Personnel Academic Months | 0.00 |

| | |
|---|---|
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $15,884 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 4.80 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $27,600 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $21,292 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $64,776 |
| **C. Fringe Benefits** | $9,219 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $73,995 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |

| | |
|---|---|
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $10,961 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $6,000 |
| *Total Other Direct Costs (G)* | $16,961 |
| **H. Total Direct Costs (A Through G)** | **$90,956** |
| **I. Indirect Costs*** | **$59,044** |
| **J. Total Direct and Indirect Costs (H + I)** | $150,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$150,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2331228
**Managing Division Abbreviation:** IOS **Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Frwd Funded
**Amendment Date:** 09/21/2023
**Amendment Number:** 001
**Proposal Number:** 2348297
**Amendment Description:**

The purpose of this amendment is to forward fund scheduled incremental funding to the award in the amount shown below in the Funding Information section.

This amendment includes funds that were originally scheduled to be released in FY 2024. It is still the grantee's responsibility to submit an annual project report for each year in accordance with the NSF policies.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2331228
**Award Instrument:** Continuing Grant
**Award Date:** 08/04/2023
**Award Period of Performance:** Start Date: 08/15/2023 End Date: 07/31/2025
**Project Title:** EAGER: Identifying the genetic determinants of plasmid-dependent phage host range
**Managing Division Abbreviation:** IOS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-1 Proposal & Award Policies & Procedures Guide - PAPPG
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $150,000
**Total Intended Award Amount:** $300,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $300,000

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov
**Phone:** (703) 292-4839

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Mamta Rawat
**Email:** mrawat@nsf.gov
**Phone:** (703) 292-7265

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.20 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $16,361 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 4.80 |
| Post Doctoral Calendar Months | 1.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $28,980 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $22,357 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $67,698 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $67,698 |
| **D. Equipment** | $9,612 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $7,646 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $6,000 |
| *Total Other Direct Costs (G)* | $13,646 |
| **H. Total Direct Costs (A Through G)** | **$90,956** |
| **I. Indirect Costs*** | **$59,044** |
| **J. Total Direct and Indirect Costs (H + I)** | $150,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$150,000** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2331831
**Managing Division Abbreviation:** IIS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 09/18/2023
**Amendment Number:** 000
**Proposal Number:** 2331831
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2331831
**Award Instrument:** Standard Grant
**Award Date:** 09/18/2023
**Award Period of Performance:** Start Date: 11/01/2023 End Date: 10/31/2026
**Project Title:** SLES: A Theoretical Lens on Generative AI Safety: Near and Long Term
**Managing Division Abbreviation:** IIS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-562 Safe Learning-Enabled Systems
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $800,000

**Total Intended Award Amount:** $800,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $800,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov
**Phone:** (703) 292-7859

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Vladimir Pavlovic
**Email:** vpavlovi@nsf.gov
**Phone:** (703) 292-8318

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-562 Safe Learning-Enabled Systems.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 8.99 |
| Senior Personnel Calendar | 6.00 |

| | |
|---|---|
| Months | |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $155,436 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 6.00 |
| Graduate Students Amount | $205,399 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $360,835 |
| **C. Fringe Benefits** | $33,416 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $394,251 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $24,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs | $0 |

| | |
|---|---|
| Stipends | |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $1,915 |
| Publication Costs | $3,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $84,849 |
| *Total Other Direct Costs (G)* | $89,764 |
| **H. Total Direct Costs (A Through G)** | **$508,015** |
| **I. Indirect Costs*** | **$291,985** |
| **J. Total Direct and Indirect Costs (H + I)** | $800,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$800,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2332539
**Managing Division Abbreviation:** CHE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 06/27/2023
**Amendment Number:** 000
**Proposal Number:** 2332539
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2332539
**Award Instrument:** Standard Grant
**Award Date:** 06/27/2023
**Award Period of Performance:** Start Date: 08/01/2023 End Date: 07/31/2025
**Project Title:** EAGER: Coherent Manipulation and Quantum Entanglement in Ultracold Reactions
**Managing Division Abbreviation:** CHE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-1 Proposal & Award Policies & Procedures Guide - PAPPG
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $300,000

**Total Intended Award Amount:** $300,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $300,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Amanda Haes
**Email:** ahaes@nsf.gov
**Phone:** (703) 292-7909

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 0.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $14,046 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 2.00 |

| | |
|---|---|
| Post Doctoral Calendar Months | 0.60 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $39,928 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $44,518 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $98,492 |
| **C. Fringe Benefits** | $11,605 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $110,097 |
| **D. Equipment** | $100,000 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |

| | |
|---|---|
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $13,938 |
| *Total Other Direct Costs (G)* | $13,938 |
| **H. Total Direct Costs (A Through G)** | **$224,035** |
| **I. Indirect Costs*** | **$75,965** |
| **J. Total Direct and Indirect Costs (H + I)** | $300,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$300,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2332668
**Managing Division Abbreviation:** OSI **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 06/25/2024
**Amendment Number:** 000
**Proposal Number:** 2332668
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 06/11/2024.

## AWARD INFORMATION

**Award Number (FAIN):** 2332668
**Award Instrument:** Standard Grant
**Award Date:** 06/25/2024
**Award Period of Performance:** Start Date: 07/01/2024 End Date: 06/30/2027
**Project Title:** Collaborative Research: SWIFT-SAT: Coexistence of Remote Astronomical Instruments Susceptible to Interference with Large Communication Satellite Constellations
**Managing Division Abbreviation:** OSI
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-567 Spectrum and Wireless Innovation enabled by Future Technologies - Satellite-Terrestrial Coexistence
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting), 47.078 Polar Programs

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $259,284
**Total Intended Award Amount:** $259,284
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $259,284
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2332665 | Y | [redacted] | University of New Mexico |
| 2332666 | N | [redacted] | University of Minnesota-Twin Cities |
| 2332667 | N | [redacted] | The University of Chicago |
| 2332668 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** John Michael Chapin
**Email:** jchapin@nsf.gov
**Phone:** (703) 292-8222

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at

https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-567 Spectrum and Wireless Innovation enabled by Future Technologies - Satellite-Terrestrial Coexistence.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 1.44 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $37,470 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $68,873 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |

| | |
|---|---|
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $106,343 |
| **C. Fringe Benefits** | $8,320 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $114,663 |
| **D. Equipment** | $33,466 |
| **E. Travel** | |
| Domestic | $2,160 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $4,500 |
| Subawards | $0 |
| Other | $20,784 |
| *Total Other Direct Costs (G)* | $25,284 |
| **H. Total Direct Costs (A Through G)** | **$175,573** |
| **I. Indirect Costs*** | **$83,711** |
| **J. Total Direct and Indirect Costs (H + I)** | $259,284 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$259,284** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2333014
**Managing Division Abbreviation:** DBI **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/08/2024
**Amendment Number:** 000
**Proposal Number:** 2333014
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2333014
**Award Instrument:** Standard Grant
**Award Date:** 08/08/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2027
**Project Title:** Rehousing and Digitization of the Museum of Comparative Zoology Recent Invertebrate Microscope Slide Collections
**Managing Division Abbreviation:** DBI
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-580 Infrastructure Capacity for Biological Research
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $639,620
**Total Intended Award Amount:** $639,620
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $639,620
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| | | |
|---|---|---|
| **Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Termia M. Millard
**Email:** tmillard@nsf.gov
**Phone:** (703) 292-7074

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Reed Schiele Beaman
**Email:** rsbeaman@nsf.gov
**Phone:** (703) 292-7163

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-580 Infrastructure

Capacity for Biological Research.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 15.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 6.00 |
| Other Professionals Calendar Months | 54.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $198,552 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 3.00 |
| Undergraduate Students Amount | $18,574 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 3.00 |
| Other Amount | $8,915 |
| *Total Salaries and Wages (A+B)* | $226,041 |
| **C. Fringe Benefits** | $82,876 |

| | |
|---|---|
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $308,917 |
| **D. Equipment** | $137,661 |
| **E. Travel** | |
| Domestic | $2,368 |
| International | $3,124 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $60,188 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $60,188 |
| **H. Total Direct Costs (A Through G)** | **$512,258** |
| **I. Indirect Costs*** | **$127,362** |
| **J. Total Direct and Indirect Costs (H + I)** | $639,620 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$639,620** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC, Other Sponsored Activities rate | 34.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG)

Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2333466
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 12/19/2023
**Amendment Number:** 000
**Proposal Number:** 2333466
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2333466
**Award Instrument:** Continuing Grant
**Award Date:** 12/19/2023
**Award Period of Performance:** Start Date: 01/01/2024 End Date: 12/31/2025
**Project Title:** EAGER: Collaborative K-12 Outreach at the Interface between Biology and Imaging Science
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-593 Division of Physics: Investigator-Initiated Research Projects
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $149,971
**Total Intended Award Amount:** $299,942
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $149,971
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $149,971 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Krastan B Blagoev
**Email:** kblagoev@nsf.gov
**Phone:** (703) 292-4666

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic | 0.00 |

| | |
|---|---|
| Months | |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs | $0 |

| | |
|---|---|
| Travel | |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $88,740 |
| *Total Other Direct Costs (G)* | $88,740 |
| **H. Total Direct Costs (A Through G)** | **$88,740** |
| **I. Indirect Costs*** | **$61,231** |
| **J. Total Direct and Indirect Costs (H + I)** | $149,971 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$149,971** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Indirect/Overhead/F&A Rate | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2333888
**Managing Division Abbreviation:** IOS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 12/20/2023
**Amendment Number:** 000
**Proposal Number:** 2333888
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2333888
**Award Instrument:** Continuing Grant
**Award Date:** 12/20/2023
**Award Period of Performance:** Start Date: 02/01/2024 End Date: 01/31/2027
**Project Title:** Collaborative Research: NSF-BSF: Under Pressure: The evolution of guard cell turgor and the rise of the angiosperms
**Managing Division Abbreviation:** IOS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-547 Division of Integrative Organismal Systems Core Programs
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $273,690
**Total Intended Award Amount:** $735,900
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $273,690
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $226,865 |
| 2026 | $235,345 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2333888 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2333889 | N | [redacted] | Yale University |
| 2333890 | N | [redacted] | Purdue University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Termia M. Millard
**Email:** tmillard@nsf.gov
**Phone:** (703) 292-7074

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Theodore J. Morgan
**Email:** tmorgan@nsf.gov
**Phone:** (703) 292-7868

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-547 Division of Integrative Organismal Systems Core Programs.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $26,164 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $65,000 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar | 0.00 |

| | |
|---|---|
| Months | |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 1.00 |
| Undergraduate Students Amount | $9,180 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $100,344 |
| **C. Fringe Benefits** | $20,300 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $120,644 |
| **D. Equipment** | $47,455 |
| **E. Travel** | |
| Domestic | $1,873 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $11,350 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $11,350 |
| **H. Total Direct Costs (A** | **$181,322** |

| | |
|---|---|
| **Through G)** | |
| **I. Indirect Costs*** | **$92,368** |
| **J. Total Direct and Indirect Costs (H + I)** | $273,690 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$273,690** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2333904
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 11/15/2023
**Amendment Number:** 000
**Proposal Number:** 2333904
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

In accordance with sections 1869a and 1869b of title 42 of the United States Code, the awardee will do the following: 1. Obtain from the school board or comparable authority responsible for the schools considering participation in the project, written approval prior to involvement of pre-college students in pre-college education research and development, pilot-testing, evaluation, and revision of experimental and innovative pre-college curriculum. 2. Include in every publication, testing, or distribution agreement involving instructional materials developed under this grant (including, but not limited to, teachers' manuals, textbooks, films, tapes, or other supplementary material) a requirement that such material be made available within the school district using it for inspection by parents or guardians of children engaged in educational programs or projects using such material of that school district.

## AWARD INFORMATION

**Award Number (FAIN):** 2333904
**Award Instrument:** Continuing Grant
**Award Date:** 11/15/2023
**Award Period of Performance:** Start Date: 12/01/2023 End Date: 11/30/2025
**Project Title:** EAGER: Researching Team-Based Learning in High-School Physics Classes
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes

**Funding Opportunity:** NSF 21-593 Division of Physics: Investigator-Initiated Research Projects
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $155,273
**Total Intended Award Amount:** $300,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $155,273
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $144,727 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Krastan B Blagoev
**Email:** kblagoev@nsf.gov
**Phone:** (703) 292-4666

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $18,304 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 1.00 |
| Other Professionals Calendar Months | 2.60 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $18,000 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $44,410 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $80,714 |
| **C. Fringe Benefits** | $5,699 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $86,413 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $9,235 |
| *Total Other Direct Costs (G)* | $9,235 |
| **H. Total Direct Costs (A Through G)** | **$95,648** |
| **I. Indirect Costs*** | **$59,625** |
| **J. Total Direct and Indirect Costs (H + I)** | $155,273 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$155,273** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2334882
**Managing Division Abbreviation:** CNS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/21/2024
**Amendment Number:** 000
**Proposal Number:** 2334882
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2334882
**Award Instrument:** Standard Grant
**Award Date:** 08/21/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2027
**Project Title:** Collaborative Research: Artificially-Evolved Modular Robotic Swimmers for Enhanced Mobility in Challenging Hydrodynamic Environments
**Managing Division Abbreviation:** CNS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 20-144Y Foundational Research in Robotics
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting), 47.041 Engineering Grants

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $302,687
**Total Intended Award Amount:** $302,687
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $302,687
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2334881 | Y | [redacted] | The Pennsylvania State University |
| 2334882 | N | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2334883 | N | [redacted] | Colorado State University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Mikki Slade
**Email:** mslade@nsf.gov
**Phone:** (703) 292-2622

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Ralph F Wachter
**Email:** rwachter@nsf.gov
**Phone:** (703) 292-8950

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.30 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $8,656 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 2.00 |
| Post Doctoral Calendar Months | 24.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $134,640 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $143,296 |
| **C. Fringe Benefits** | $30,809 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $174,105 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $5,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $5,000 |
| **H. Total Direct Costs (A Through G)** | **$179,105** |
| **I. Indirect Costs*** | **$123,582** |
| **J. Total Direct and Indirect Costs (H + I)** | $302,687 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$302,687** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2334984
**Managing Division Abbreviation:** DBI **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/27/2024
**Amendment Number:** 000
**Proposal Number:** 2334984
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by email dated 03/05/2024.

The Foundation authorizes the awardee to enter into the proposed subaward arrangement. The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

## AWARD INFORMATION

**Award Number (FAIN):** 2334984
**Award Instrument:** Standard Grant
**Award Date:** 03/27/2024
**Award Period of Performance:** Start Date: 04/01/2024 End Date: 03/31/2026
**Project Title:** DESIGN: Culture Change - Building a Relational and Inclusive Discipline through Genetics Engagement (CC-BRIDGE)
**Managing Division Abbreviation:** DBI
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-542 Leading Culture Change Through Professional Societies of Biology
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $499,957
**Total Intended Award Amount:** $499,957
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $499,957
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| | | |
|---|---|---|
| **Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** GENETICS SOCIETY OF AMERICA INC |
| **co-Principal Investigator:** [redacted] | **Email** [redacted] | **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
| **co-Principal Investigator:** [redacted] | **Email:** [redacted] | **Organization:** GENETICS SOCIETY OF AMERICA INC |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Termia M. Millard
**Email:** tmillard@nsf.gov
**Phone:** (703) 292-7074

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Wilson A. Francisco
**Email:** wfrancis@nsf.gov
**Phone:** (703) 292-7856

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-542 Leading Culture Change Through Professional Societies of Biology.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 10.00 |
| Senior Personnel Calendar Months | 13.80 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $113,438 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $113,438 |

| | |
|---|---|
| **C. Fringe Benefits** | $43,142 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $156,580 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $2,096 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $40,000 |
| Computer Services | $0 |
| Subawards | $211,811 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $251,811 |
| **H. Total Direct Costs (A Through G)** | **$410,487** |
| **I. Indirect Costs*** | **$89,470** |
| **J. Total Direct and Indirect Costs (H + I)** | $499,957 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$499,957** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2336044
**Managing Division Abbreviation:** EAR **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/22/2024
**Amendment Number:** 000
**Proposal Number:** 2336044
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Year 4 and Year 5 budgets will be released in Fiscal Year 2027. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2336044
**Award Instrument:** Continuing Grant
**Award Date:** 02/22/2024
**Award Period of Performance:** Start Date: 07/01/2024 End Date: 06/30/2029

**Project Title:** CAREER: Habitability of the Hadean Earth - A South African perspective
**Managing Division Abbreviation:** EAR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $107,136
**Total Intended Award Amount:** $887,605
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $107,136
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $223,085 |
| 2026 | $280,638 |
| 2027 | $276,746 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Awarding Official**
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov

**Managing Program Officer**
**Name:** Jennifer A Wade
**Email:** jwade@nsf.gov
**Phone:** (703) 292-4739

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $13,070 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 2.00 |
| Undergraduate Students Amount | $9,600 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $22,670 |

| | |
|---|---|
| **C. Fringe Benefits** | $2,810 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $25,480 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $11,164 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $1,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $25,750 |
| *Total Other Direct Costs (G)* | $26,750 |
| **H. Total Direct Costs (A Through G)** | **$63,394** |
| **I. Indirect Costs*** | **$43,742** |
| **J. Total Direct and Indirect Costs (H + I)** | $107,136 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$107,136** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Overhead | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2336044
**Managing Division Abbreviation:** EAR **Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Frwd Funded
**Amendment Date:** 08/28/2024
**Amendment Number:** 001
**Proposal Number:** 2447956
**Amendment Description:**

The purpose of this amendment is to forward fund scheduled incremental funding to the award in the amount shown below in the Funding Information section.

This amendment includes funds that were originally scheduled to be released in a future fiscal year 2025. It is still the grantee's responsibility to submit an annual project report for each year in accordance with the NSF policies.

Funds provided by this award include support for "Research Experiences for Undergraduates" in accordance with the NSF program solicitation NSF 23-601.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2336044
**Award Instrument:** Continuing Grant
**Award Date:** 02/22/2024
**Award Period of Performance:** Start Date: 07/01/2024 End Date: 06/30/2029
**Project Title:** CAREER: Habitability of the Hadean Earth - A South African perspective
**Managing Division Abbreviation:** EAR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program

**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $223,085
**Total Intended Award Amount:** $887,605
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $330,221

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Awarding Official**
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov

**Managing Program Officer**
**Name:** Jennifer A Wade
**Email:** jwade@nsf.gov
**Phone:** (703) 292-4739

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |

| | |
|---|---|
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $13,462 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $65,000 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 2.00 |
| Undergraduate Students Amount | $9,888 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $88,350 |
| **C. Fringe Benefits** | $16,869 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $105,219 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $13,784 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |

| | |
|---|---|
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $1,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $12,000 |
| *Total Other Direct Costs (G)* | $13,000 |
| **H. Total Direct Costs (A Through G)** | **$132,003** |
| **I. Indirect Costs*** | **$91,082** |
| **J. Total Direct and Indirect Costs (H + I)** | $223,085 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$223,085** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2337516
**Managing Division Abbreviation:** BCS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 01/24/2024
**Amendment Number:** 000
**Proposal Number:** 2337516
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2337516
**Award Instrument:** Standard Grant
**Award Date:** 01/24/2024
**Award Period of Performance:** Start Date: 02/15/2024 End Date: 01/31/2026
**Project Title:** Doctoral Dissertation Research: Investigating the genomic underpinnings of the human hand and foot
**Managing Division Abbreviation:** BCS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-504 Biological Anthropology Program - Doctoral Dissertation Research Improvement Grants
**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $42,250
**Total Intended Award Amount:** $42,250
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $42,250
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov
**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov

**Managing Program Officer**
**Name:** Marta Pilar Alfonso-Durruty
**Email:** malfonso@nsf.gov
**Phone:** (703) 292-7811

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-504 Biological Anthropology Program - Doctoral Dissertation Research Improvement Grants.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 4.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |

| | |
|---|---|
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |

| | |
|---|---|
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $8,500 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $16,500 |
| *Total Other Direct Costs (G)* | $25,000 |
| **H. Total Direct Costs (A Through G)** | **$25,000** |
| **I. Indirect Costs*** | **$17,250** |
| **J. Total Direct and Indirect Costs (H + I)** | $42,250 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$42,250** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2338206

**Managing Division Abbreviation:** CHE

**Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/21/2024
**Amendment Number:** 000
**Proposal Number:** 2338206
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 02/09/2024.

## AWARD INFORMATION

**Award Number (FAIN):** 2338206
**Award Instrument:** Continuing Grant
**Award Date:** 03/21/2024
**Award Period of Performance:** Start Date: 07/01/2024 End Date: 06/30/2029
**Project Title:** CAREER: CAS: Organic Photochemistry for Light-Driven CO2 Capture and Release
**Managing Division Abbreviation:** CHE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $322,644
**Total Intended Award Amount:** $770,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $322,644
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $447,356 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Tingyu Li
**Email:** tli@nsf.gov
**Phone:** (703) 292-4949

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 2.00 |

| | |
|---|---|
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $29,088 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $91,350 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 2.00 |
| Undergraduate Students Amount | $10,150 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $130,588 |
| **C. Fringe Benefits** | $6,254 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $136,842 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |

| | |
|---|---|
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $17,852 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $52,931 |
| *Total Other Direct Costs (G)* | $70,783 |
| **H. Total Direct Costs (A Through G)** | **$207,625** |
| **I. Indirect Costs*** | **$115,019** |
| **J. Total Direct and Indirect Costs (H + I)** | $322,644 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$322,644** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2338206

**Managing Division Abbreviation:** CHE

**Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Frwd Funded
**Amendment Date:** 09/03/2024
**Amendment Number:** 001
**Proposal Number:** 2448401
**Amendment Description:**

The purpose of this amendment is to forward fund scheduled incremental funding to the award in the amount shown below in the Funding Information section.

This amendment includes funds that were originally scheduled to be released in a future fiscal year. It is still the grantee's responsibility to submit an annual project report for each year in accordance with the NSF policies.

Except as modified by this amendment, the award conditions remain unchanged.

## AWARD INFORMATION

**Award Number (FAIN):** 2338206
**Award Instrument:** Continuing Grant
**Award Date:** 03/21/2024
**Award Period of Performance:** Start Date: 07/01/2024 End Date: 06/30/2029
**Project Title:** CAREER: CAS: Organic Photochemistry for Light-Driven CO2 Capture and Release
**Managing Division Abbreviation:** CHE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (See Amendment 000 for source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $447,356
**Total Intended Award Amount:** $770,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $770,000

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email** [redacted]

**Organization:**
PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Denise M. Martin
**Email:** dmartin@nsf.gov

**Managing Program Officer**
**Name:** Tingyu Li
**Email:** tli@nsf.gov
**Phone:** (703) 292-4949

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 2.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $31,095 |

| | |
|---|---|
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $147,562 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 3.00 |
| Undergraduate Students Amount | $16,397 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $195,054 |
| **C. Fringe Benefits** | $6,685 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $201,739 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |

| | |
|---|---|
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $26,778 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $48,742 |
| *Total Other Direct Costs (G)* | $75,520 |
| **H. Total Direct Costs (A Through G)** | **$277,259** |
| **I. Indirect Costs*** | **$170,097** |
| **J. Total Direct and Indirect Costs (H + I)** | $447,356 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$447,356** |
| **M. Cost Sharing Proposed Level** | $0 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2338760
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 01/10/2024
**Amendment Number:** 000
**Proposal Number:** 2338760
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 12/19/2023.

## AWARD INFORMATION

**Award Number (FAIN):** 2338760
**Award Instrument:** Continuing Grant
**Award Date:** 01/10/2024
**Award Period of Performance:** Start Date: 07/01/2024 End Date: 06/30/2029
**Project Title:** CAREER: Statistical Inference in Observational Studies -- Theory, Methods, and Beyond
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences
(Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $81,885

**Total Intended Award Amount:** $450,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $81,885
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $87,458 |
| 2026 | $90,762 |
| 2027 | $94,202 |
| 2028 | $95,693 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:**
PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Jun Zhu
**Email:** jzhu@nsf.gov
**Phone:** (703) 292-4551

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

**A. Senior Personnel**

| | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.80 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $24,308 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $15,594 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $39,902 |
| **C. Fringe Benefits** | $5,469 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $45,371 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $1,500 |
| International | $0 |
| **F. Participant Support Costs** | |

| | |
|---|---|
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $7,126 |
| *Total Other Direct Costs (G)* | $7,126 |
| **H. Total Direct Costs (A Through G)** | **$53,997** |
| **I. Indirect Costs*** | **$27,888** |
| **J. Total Direct and Indirect Costs (H + I)** | $81,885 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$81,885** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 59.5000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2339524
**Managing Division Abbreviation:** IIS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/15/2024
**Amendment Number:** 000
**Proposal Number:** 2339524
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2339524
**Award Instrument:** Continuing Grant
**Award Date:** 02/15/2024
**Award Period of Performance:** Start Date: 02/15/2024 End Date: 01/31/2029
**Project Title:** CAREER: Geometric Deep Learning to Facilitate Algorithmic and Scientific Advances in Therapeutics
**Managing Division Abbreviation:** IIS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $186,822
**Total Intended Award Amount:** $566,128
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $186,822
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $141,532 |
| 2026 | $90,580 |
| 2027 | $90,580 |
| 2028 | $56,614 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov
**Phone:** (703) 292-7859

**Awarding Official**
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov

**Managing Program Officer**
**Name:** Christopher C Yang
**Email:** ccyang@nsf.gov
**Phone:** (703) 292-8111

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

| A. Senior Personnel |
|---|

| | |
|---|---|
| Senior Personnel Count | 5.00 |
| Senior Personnel Calendar Months | 3.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $14,145 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 5.00 |
| Graduate Students Amount | $81,461 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $95,606 |
| **C. Fringe Benefits** | $2,998 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $98,604 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $577 |
| International | $1,072 |

| | |
|---|---|
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $13,912 |
| *Total Other Direct Costs (G)* | $13,912 |
| **H. Total Direct Costs (A Through G)** | **$114,165** |
| **I. Indirect Costs*** | **$72,657** |
| **J. Total Direct and Indirect Costs (H + I)** | $186,822 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$186,822** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2339621
**Managing Division Abbreviation:** DEB **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 05/31/2024
**Amendment Number:** 000
**Proposal Number:** 2339621
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2339621
**Award Instrument:** Continuing Grant
**Award Date:** 05/31/2024
**Award Period of Performance:** Start Date: 06/01/2024 End Date: 05/31/2029
**Project Title:** CAREER: Microbial Mediation of Temperate Tree Responses to Climate Change
**Managing Division Abbreviation:** DEB
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $311,154

**Total Intended Award Amount:** $1,198,253
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $311,154
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $202,934 |
| 2026 | $684,165 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Kirsten Schwarz
**Email:** kschwarz@nsf.gov
**Phone:** (703) 292-2416

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.00 |

| | |
|---|---|
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $12,684 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 1.00 |
| Other Professionals Calendar Months | 12.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $48,000 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $60,684 |
| **C. Fringe Benefits** | $22,551 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $83,235 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $5,295 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |

| | |
|---|---|
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $43,585 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $52,000 |
| *Total Other Direct Costs (G)* | $95,585 |
| **H. Total Direct Costs (A Through G)** | **$184,115** |
| **I. Indirect Costs*** | **$127,039** |
| **J. Total Direct and Indirect Costs (H + I)** | $311,154 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$311,154** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2339913
**Managing Division Abbreviation:** DMR **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 01/02/2024
**Amendment Number:** 000
**Proposal Number:** 2339913
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

## AWARD INFORMATION

**Award Number (FAIN):** 2339913
**Award Instrument:** Continuing Grant
**Award Date:** 01/02/2024
**Award Period of Performance:** Start Date: 01/15/2024 End Date: 12/31/2028
**Project Title:** CAREER: Epitaxial stabilization of non-perovskite oxide quantum materials
**Managing Division Abbreviation:** DMR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $138,414
**Total Intended Award Amount:** $786,598
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $138,414
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $207,756 |
| 2026 | $190,109 |
| 2027 | $152,472 |
| 2028 | $97,847 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov

**Managing Program Officer**
**Name:** Tomasz Durakiewicz
**Email:** tdurakie@nsf.gov
**Phone:** (703) 292-4892

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.33 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $5,559 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $44,518 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $50,077 |
| **C. Fringe Benefits** | $1,195 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $51,272 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $2,500 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $4,000 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 1.00 |
| *Total Participant Costs (F)* | $4,000 |
| **G. Other Direct Costs** | |
| Materials Supplies | $5,180 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $28,576 |
| *Total Other Direct Costs (G)* | $33,756 |
| **H. Total Direct Costs (A Through G)** | **$91,528** |
| **I. Indirect Costs*** | **$46,886** |
| **J. Total Direct and Indirect Costs (H + I)** | $138,414 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$138,414** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2401057
**Managing Division Abbreviation:** IOS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/12/2024
**Amendment Number:** 000
**Proposal Number:** 2401057
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/02/2024.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

## AWARD INFORMATION

**Award Number (FAIN):** 2401057
**Award Instrument:** Continuing Grant
**Award Date:** 07/12/2024
**Award Period of Performance:** Start Date: 07/15/2024 End Date: 06/30/2027
**Project Title:** Mechanisms for the establishment of polarity during whole-body regeneration
**Managing Division Abbreviation:** IOS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-547 Division of Integrative Organismal Systems Core Programs
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $400,000
**Total Intended Award Amount:** $1,000,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $400,000
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $300,000 |
| 2026 | $300,000 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Termia M. Millard
**Email:** tmillard@nsf.gov
**Phone:** (703) 292-7074

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Anna K. Allen
**Email:** akallen@nsf.gov
**Phone:** (703) 292-8011

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-547 Division of Integrative Organismal Systems Core Programs.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |

| | |
|---|---|
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $23,467 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $67,600 |
| **Other Professionals** | |
| Other Professionals Count | 1.00 |
| Other Professionals Calendar Months | 9.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $37,457 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $128,524 |
| **C. Fringe Benefits** | $35,911 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $164,435 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $1,100 |
| International | $0 |
| **F. Participant Support Costs** | |

| | |
|---|---|
| Participant Support Costs Stipends | $1,100 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $200 |
| Total Number of Participants | 5.00 |
| *Total Participant Costs (F)* | $1,300 |
| **G. Other Direct Costs** | |
| Materials Supplies | $29,673 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $40,709 |
| *Total Other Direct Costs (G)* | $70,382 |
| **H. Total Direct Costs (A Through G)** | **$237,217** |
| **I. Indirect Costs*** | **$162,783** |
| **J. Total Direct and Indirect Costs (H + I)** | $400,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$400,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2401390
**Managing Division Abbreviation:** ECCS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/10/2024
**Amendment Number:** 000
**Proposal Number:** 2401390
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2401390
**Award Instrument:** Standard Grant
**Award Date:** 07/10/2024
**Award Period of Performance:** Start Date: 07/01/2024 End Date: 06/30/2027
**Project Title:** Collaborative Research: Stochastic Nonlinear Control and Learning via Spectral Dynamics Embedding
**Managing Division Abbreviation:** ECCS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 18-7607 Energy, Power, Control, and Networks
**Assistance Listing Number(s) and Name(s):** 47.041 Engineering Grants (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $300,000
**Total Intended Award Amount:** $300,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $300,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

| Principal Investigator: | Email: | Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE |
|---|---|---|
| [redacted] | [redacted] | |

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2401390 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2401391 | N | [redacted] | GA Tech Research Corporation, GA Institute of Technology |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Malia Williams
**Email:** malwilli@nsf.gov
**Phone:** (703) 292-2290

**Awarding Official**
**Name:** Willis Phan
**Email:** wiphan@nsf.gov

**Managing Program Officer**
**Name:** Anthony Kuh
**Email:** akuh@nsf.gov
**Phone:** (703) 292-4714

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.60 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $16,616 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $121,003 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $137,619 |
| **C. Fringe Benefits** | $3,572 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $141,191 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $6,600 |

| | |
|---|---|
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $50,232 |
| *Total Other Direct Costs (G)* | $50,232 |
| **H. Total Direct Costs (A Through G)** | **$198,023** |
| **I. Indirect Costs*** | **$101,977** |
| **J. Total Direct and Indirect Costs (H + I)** | $300,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$300,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2401498
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/08/2024
**Amendment Number:** 000
**Proposal Number:** 2401498
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/30/2024.

Fiscal Year 2024 and 2025 budgets have been combined in this award. It is still the grantees responsibility to submit an annual project report in accordance with the award terms and conditions.

## AWARD INFORMATION

**Award Number (FAIN):** 2401498
**Award Instrument:** Continuing Grant
**Award Date:** 08/08/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2027
**Project Title:** Birational Geometry, Hodge Theory and Singularities
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 20-1264 Algebra and Number Theory
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $222,345
**Total Intended Award Amount:** $335,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $222,345
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2026 | $112,655 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** James M. Douglass
**Email:** mdouglas@nsf.gov
**Phone:** (703) 292-2467

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 2.00 |
| Senior Personnel Academic Months | 0.00 |

| | |
|---|---|
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $60,000 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $38,245 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $98,245 |
| **C. Fringe Benefits** | $13,320 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $111,565 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $10,000 |
| International | $10,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |

| | |
|---|---|
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$131,565** |
| **I. Indirect Costs*** | **$90,780** |
| **J. Total Direct and Indirect Costs (H + I)** | $222,345 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$222,345** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2401907
**Managing Division Abbreviation:** CMMI **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/15/2024
**Amendment Number:** 000
**Proposal Number:** 2401907
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

NSF anticipates holding joint NRI/FRR annual Principal Investigator (PI) meetings for research investigators, industrial partners, and sponsoring agency representatives. These meetings will be highlighted by technology demonstrations and progress reports, and will provide a forum for all to discuss best practices, concerns, and high-risk, high-return ideas and challenges pertinent to robots. All FRR PIs are welcomed and encouraged to participate in these meetings.

## AWARD INFORMATION

**Award Number (FAIN):** 2401907
**Award Instrument:** Standard Grant
**Award Date:** 08/15/2024
**Award Period of Performance:** Start Date: 01/01/2025 End Date: 12/31/2027
**Project Title:** Collaborative Research: Climbing and Object Grasping Through Tunable Capillary Adhesion in an Insect-Scale Robot
**Managing Division Abbreviation:** CMMI
**Research and Development Award:** Yes
**Funding Opportunity:** PD 20-144Y Foundational Research in Robotics
**Assistance Listing Number(s) and Name(s):** 47.041 Engineering Grants (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $325,497
**Total Intended Award Amount:** $325,497
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $325,497
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2401906 | Y | [redacted] | Massachusetts Institute of Technology |
| 2401907 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Tamika Lloyd
**Email:** tlloyd@nsf.gov
**Phone:**

**Awarding Official**
**Name:** Willis Phan
**Email:** wiphan@nsf.gov

**Managing Program Officer**
**Name:** Jordan M. Berg
**Email:** jberg@nsf.gov
**Phone:** (703) 292-5365

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.30 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $9,263 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $139,307 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $148,570 |
| **C. Fringe Benefits** | $1,992 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $150,562 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $6,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $60,907 |
| *Total Other Direct Costs (G)* | $66,907 |
| **H. Total Direct Costs (A Through G)** | **$217,469** |
| **I. Indirect Costs*** | **$108,028** |
| **J. Total Direct and Indirect Costs (H + I)** | $325,497 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$325,497** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2402464
**Managing Division Abbreviation:** EAR **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/22/2024
**Amendment Number:** 000
**Proposal Number:** 2402464
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above .

## AWARD INFORMATION

**Award Number (FAIN):** 2402464
**Award Instrument:** Standard Grant
**Award Date:** 07/22/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2027
**Project Title:** Collaborative Research: PYRITE OXIDATION AND THE ENSUING TRIPLE O ISOTOPE COMPOSITION OF SULFATE
**Managing Division Abbreviation:** EAR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-578 Geobiology and Low-Temperature Geochemistry (GG)
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $395,871
**Total Intended Award Amount:** $395,871
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $395,871
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2402464 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2402465 | N | [redacted] | Montana State University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Awarding Official**
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov

**Managing Program Officer**
**Name:** Alberto Perez-Huerta
**Email:** aperezhu@nsf.gov
**Phone:**

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-578 Geobiology and Low-Temperature Geochemistry (GG).

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.75 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $18,375 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 3.00 |
| Other Professionals Calendar Months | 3.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $22,551 |
| **Graduate Students** | |
| Graduate Students Count | 36.00 |
| Graduate Students Amount | $135,567 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $176,493 |
| **C. Fringe Benefits** | $8,799 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $185,292 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $6,777 |
| International | $4,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $22,347 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $26,749 |
| *Total Other Direct Costs (G)* | $49,096 |
| **H. Total Direct Costs (A Through G)** | **$245,165** |
| **I. Indirect Costs*** | **$150,706** |
| **J. Total Direct and Indirect Costs (H + I)** | $395,871 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$395,871** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2406110
**Managing Division Abbreviation:** AST **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/29/2024
**Amendment Number:** 000
**Proposal Number:** 2406110
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2406110
**Award Instrument:** Standard Grant
**Award Date:** 08/29/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2027
**Project Title:** CDS&E: Enabling Population Studies of Supernovae in the Era of Vera Rubin via Simulated-based Inference
**Managing Division Abbreviation:** AST
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-624 Astronomy and Astrophysics Research Grants
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $436,310
**Total Intended Award Amount:** $436,310
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $436,310
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Aprile N Roberson
**Email:** aroberso@nsf.gov

**Managing Program Officer**
**Name:** Glen I Langston
**Email:** glangsto@nsf.gov
**Phone:** (703) 292-4937

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-624 Astronomy and Astrophysics Research Grants.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.36 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $5,519 |

| | |
|---|---|
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 3.00 |
| Post Doctoral Calendar Months | 30.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $183,512 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $189,031 |
| **C. Fringe Benefits** | $40,641 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $229,672 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $15,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |

| | |
|---|---|
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $2,500 |
| Publication Costs | $6,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $5,000 |
| *Total Other Direct Costs (G)* | $13,500 |
| **H. Total Direct Costs (A Through G)** | **$258,172** |
| **I. Indirect Costs*** | **$178,138** |
| **J. Total Direct and Indirect Costs (H + I)** | $436,310 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$436,310** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2406905
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/07/2024
**Amendment Number:** 000
**Proposal Number:** 2406905
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/11/2024.

Fiscal Year 2024 and 2025 budgets have been combined in this award. It is still the grantees responsibility to submit an annual project report in accordance with the award terms and conditions.

## AWARD INFORMATION

**Award Number (FAIN):** 2406905
**Award Instrument:** Continuing Grant
**Award Date:** 08/07/2024
**Award Period of Performance:** Start Date: 08/15/2024 End Date: 07/31/2027
**Project Title:** Towards Geometry-Informed Machine Learning: A Comprehensive Framework for Recognizing and Leveraging Heterogeneous Geometric Structure in Data
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 16-1266 Applied Mathematics
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $120,000
**Total Intended Award Amount:** $180,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $120,000
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2026 | $60,000 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Stacey Levine
**Email:** slevine@nsf.gov
**Phone:** (703) 292-2948

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 0.50 |
| Senior Personnel Academic Months | 0.00 |

| | |
|---|---|
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $9,480 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $44,569 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $54,049 |
| **C. Fringe Benefits** | $2,104 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $56,153 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $4,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |

| | |
|---|---|
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $18,341 |
| *Total Other Direct Costs (G)* | $18,341 |
| **H. Total Direct Costs (A Through G)** | **$78,494** |
| **I. Indirect Costs*** | **$41,506** |
| **J. Total Direct and Indirect Costs (H + I)** | $120,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$120,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2407215
**Managing Division Abbreviation:** AST **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/05/2024
**Amendment Number:** 000
**Proposal Number:** 2407215
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2407215
**Award Instrument:** Standard Grant
**Award Date:** 08/05/2024
**Award Period of Performance:** Start Date: 08/15/2024 End Date: 07/31/2027
**Project Title:** SMA-SPEC: A Legacy Spectral Line Survey of Protoplanetary Disks
**Managing Division Abbreviation:** AST
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-624 Astronomy and Astrophysics Research Grants
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $522,928

**Total Intended Award Amount:** $522,928
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $522,928
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov

**Managing Program Officer**
**Name:** Jacqueline Keane
**Email:** jkeane@nsf.gov
**Phone:** (703) 292-8123

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-624 Astronomy and Astrophysics Research Grants.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 3.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $95,590 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $141,033 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $236,623 |
| **C. Fringe Benefits** | $20,552 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $257,175 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $6,936 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $8,100 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $62,892 |
| *Total Other Direct Costs (G)* | $70,992 |
| **H. Total Direct Costs (A Through G)** | **$335,103** |
| **I. Indirect Costs*** | **$187,825** |
| **J. Total Direct and Indirect Costs (H + I)** | $522,928 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$522,928** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2407727

**Managing Division Abbreviation:** ECCS

**Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Other Admin No Fund Actions
**Amendment Date:** 07/01/2024
**Amendment Number:** 001
**Proposal Number:** Not Applicable
**Amendment Description:**

The purpose of this amendment is to:

- Change the project title to read NSF-SNSF: Lithium niobate based terahertz systems: fundamentals and applications..

Except as modified by this amendment, the award conditions remain unchanged.

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Malia Williams
**Email:** malwilli@nsf.gov
**Phone:** (703) 292-2290

**Awarding Official**
**Name:** Malia Williams
**Email:** malwilli@nsf.gov

**Managing Program Officer**
**Name:** Dominique M. Dagenais
**Email:** ddagenai@nsf.gov
**Phone:** (703) 292-2980

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2407727
**Managing Division Abbreviation:** ECCS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 06/13/2024
**Amendment Number:** 000
**Proposal Number:** 2407727
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2407727
**Award Instrument:** Standard Grant
**Award Date:** 06/13/2024
**Award Period of Performance:** Start Date: 07/01/2024 End Date: 06/30/2027
**Project Title:** NSF-SNSF. Lithium niobate based terahertz systems: fundamentals and applications.
**Managing Division Abbreviation:** ECCS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 18-1517 Electronics, Photonics and Magnetic Devices
**Assistance Listing Number(s) and Name(s):** 47.041 Engineering Grants (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $450,000

**Total Intended Award Amount:** $450,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $450,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Malia Williams
**Email:** malwilli@nsf.gov
**Phone:** (703) 292-2290

**Awarding Official**
**Name:** Malia Williams
**Email:** malwilli@nsf.gov

**Managing Program Officer**
**Name:** Dominique M. Dagenais
**Email:** ddagenai@nsf.gov
**Phone:** (703) 292-2980

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |

| | |
|---|---|
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $115,241 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $115,241 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $115,241 |
| **D. Equipment** | $75,000 |
| **E. Travel** | |
| Domestic | $0 |
| International | $15,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |

| | |
|---|---|
| Materials Supplies | $16,144 |
| Publication Costs | $15,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $81,559 |
| *Total Other Direct Costs (G)* | $112,703 |
| **H. Total Direct Costs (A Through G)** | **$317,944** |
| **I. Indirect Costs*** | **$132,056** |
| **J. Total Direct and Indirect Costs (H + I)** | $450,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$450,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Modified Total Direct Costs | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2407922
**Managing Division Abbreviation:** AST **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/30/2024
**Amendment Number:** 000
**Proposal Number:** 2407922
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2407922
**Award Instrument:** Standard Grant
**Award Date:** 08/30/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2028
**Project Title:** Collaborative Research: New Windows on the Dynamic Universe with the Vera C. Rubin Observatory, the InterPlanetary Network, and the International Gravitational Wave Network
**Managing Division Abbreviation:** AST
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-624 Astronomy and Astrophysics Research Grants
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $484,024
**Total Intended Award Amount:** $484,024
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $484,024
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2407921 | Y | [redacted] | Louisiana State University |
| 2407922 | N | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2407923 | N | [redacted] | University of Minnesota-Twin Cities |
| 2407924 | N | [redacted] | University of Maryland |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov

**Managing Program Officer**
**Name:** Martin D. Still
**Email:** mstill@nsf.gov
**Phone:** (703) 292-4290

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended

(42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-624 Astronomy and Astrophysics Research Grants.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 4.00 |
| Senior Personnel Calendar Months | 4.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $62,562 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $154,204 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |

| | |
|---|---|
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $216,766 |
| **C. Fringe Benefits** | $13,451 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $230,217 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $20,000 |
| International | $3,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $2,500 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $51,862 |
| *Total Other Direct Costs (G)* | $54,362 |
| **H. Total Direct Costs (A Through G)** | **$307,579** |
| **I. Indirect Costs*** | **$176,445** |
| **J. Total Direct and Indirect Costs (H + I)** | $484,024 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$484,024** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MDTC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2408960
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 05/14/2024
**Amendment Number:** 000
**Proposal Number:** 2408960
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special_conditions.jsp.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2408960
**Award Instrument:** Standard Grant
**Award Date:** 05/14/2024
**Award Period of Performance:** Start Date: 06/01/2024 End Date: 11/30/2025
**Project Title:** Conference: A Celebration of Algebraic Combinatorics
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-541 Conferences and Workshops in the Mathematical Sciences
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences
(Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $49,500
**Total Intended Award Amount:** $49,500
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $49,500
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Stefaan Guido De Winter
**Email:** sgdewint@nsf.gov
**Phone:** (703) 292-2599

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-541 Conferences and Workshops in the Mathematical Sciences.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |

| | |
|---|---|
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $17,000 |
| International | $8,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $16,000 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 20.00 |
| *Total Participant Costs (F)* | $16,000 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$41,000** |
| **I. Indirect Costs*** | **$8,500** |
| **J. Total Direct and Indirect Costs (H + I)** | $49,500 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$49,500** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 34.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2409404
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Renewal
**Amendment Date:** 07/15/2024
**Amendment Number:** 000
**Proposal Number:** 2409404
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 06/07/2024.

## AWARD INFORMATION

**Award Number (FAIN):** 2409404
**Award Instrument:** Continuing Grant
**Award Date:** 07/15/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2027
**Project Title:** Quantum Simulation and Collisions with Ultracold Triatomic Molecules
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-615 Division of Physics: Investigator-Initiated Research Projects
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $366,058

**Total Intended Award Amount:** $700,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $366,058
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $165,819 |
| 2026 | $168,123 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Mark Kevin Beck
**Email:** mkbeck@nsf.gov
**Phone:** (703) 292-2983

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-615 Division of Physics: Investigator-Initiated Research Projects.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |

| | |
|---|---|
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $73,990 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $73,990 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $73,990 |
| **D. Equipment** | $210,000 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |

| | |
|---|---|
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $366 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $30,396 |
| *Total Other Direct Costs (G)* | $30,762 |
| **H. Total Direct Costs (A Through G)** | **$314,752** |
| **I. Indirect Costs*** | **$51,306** |
| **J. Total Direct and Indirect Costs (H + I)** | $366,058 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$366,058** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2409713
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Renewal
**Amendment Date:** 07/08/2024
**Amendment Number:** 000
**Proposal Number:** 2409713
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2409713
**Award Instrument:** Standard Grant
**Award Date:** 07/08/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2027
**Project Title:** Quantum Simulation with a Floquet Engineered Array of Interacting Molecules
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-615 Division of Physics: Investigator-Initiated Research Projects
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $511,970

**Total Intended Award Amount:** $511,970
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $511,970
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Mark Kevin Beck
**Email:** mkbeck@nsf.gov
**Phone:** (703) 292-2983

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-615 Division of Physics: Investigator-Initiated Research Projects.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.60 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $17,798 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 3.00 |
| Post Doctoral Calendar Months | 1.50 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $100,454 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $67,784 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $186,036 |
| **C. Fringe Benefits** | $25,424 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $211,460 |
| **D. Equipment** | $130,132 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $24,470 |
| *Total Other Direct Costs (G)* | $24,470 |
| **H. Total Direct Costs (A Through G)** | **$366,062** |
| **I. Indirect Costs*** | **$145,908** |
| **J. Total Direct and Indirect Costs (H + I)** | $511,970 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$511,970** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2412346
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/26/2024
**Amendment Number:** 000
**Proposal Number:** 2412346
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special_conditions.jsp.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2412346
**Award Instrument:** Standard Grant
**Award Date:** 02/26/2024
**Award Period of Performance:** Start Date: 05/15/2024 End Date: 04/30/2025
**Project Title:** Conference: Amplituhedra, Cluster Algebras and Positive Geometry
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-541 Conferences and Workshops in the Mathematical Sciences
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $45,000
**Total Intended Award Amount:** $45,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $45,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Stefaan Guido De Winter
**Email:** sgdewint@nsf.gov
**Phone:** (703) 292-2599

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-541 Conferences and Workshops in the Mathematical Sciences.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |

| | |
|---|---|
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $45,000 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 30.00 |
| *Total Participant Costs (F)* | $45,000 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$45,000** |
| **I. Indirect Costs*** | **$0** |
| **J. Total Direct and Indirect Costs (H + I)** | $45,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$45,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2412783
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/08/2024
**Amendment Number:** 000
**Proposal Number:** 2412783
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2412783
**Award Instrument:** Continuing Grant
**Award Date:** 07/08/2024
**Award Period of Performance:** Start Date: 07/15/2024 End Date: 06/30/2027
**Project Title:** RNA Self-Repair Induced by Sunlight: Can a Novel Mechanism Shed Light on Life's Origins and RNA Cell Function?
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-615 Division of Physics: Investigator-Initiated Research Projects
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $171,515
**Total Intended Award Amount:** $549,701
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $171,515
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $186,096 |
| 2026 | $192,090 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Krastan B Blagoev
**Email:** kblagoev@nsf.gov
**Phone:** (703) 292-4666

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-615 Division of Physics: Investigator-Initiated Research Projects.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.25 |

| | |
|---|---|
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $7,699 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $67,600 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $75,299 |
| **C. Fringe Benefits** | $16,189 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $91,488 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |

| | |
|---|---|
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $10,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $10,000 |
| **H. Total Direct Costs (A Through G)** | **$101,488** |
| **I. Indirect Costs*** | **$70,027** |
| **J. Total Direct and Indirect Costs (H + I)** | $171,515 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$171,515** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2422348
**Managing Division Abbreviation:** EFMA **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/29/2024
**Amendment Number:** 000
**Proposal Number:** 2422348
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

The Foundation authorizes the awardee to enter into the proposed subaward arrangement. The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

## AWARD INFORMATION

**Award Number (FAIN):** 2422348
**Award Instrument:** Continuing Grant
**Award Date:** 08/29/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2028
**Project Title:** EFRI BEGIN OI:Neuron-Soft Organoid-Computer Interfaces for Long-Term Three-Dimensional Neural Network Computing
**Managing Division Abbreviation:** EFMA
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 24-508 Emerging Frontiers in Research and Innovation
**Assistance Listing Number(s) and Name(s):** 47.041 Engineering Grants (Predominant source of funding for SEFA reporting), 47.049 Mathematical and Physical Sciences

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $1,775,000
**Total Intended Award Amount:** $2,000,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,775,000
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $225,000 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email** [redacted] **Organization:** UNIVERSITY OF TEXAS AT AUSTIN

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tamika Lloyd
**Email:** tlloyd@nsf.gov
**Phone:**

**Awarding Official**
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov

**Managing Program Officer**
**Name:** Alias Smith
**Email:** alismith@nsf.gov
**Phone:** (703) 292-8367

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-508 Emerging Frontiers in Research and Innovation.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 12.00 |
| Senior Personnel Calendar Months | 6.75 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $133,232 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 3.00 |
| Other Professionals Calendar Months | 3.60 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $23,775 |
| **Graduate Students** | |
| Graduate Students Count | 9.00 |
| Graduate Students Amount | $417,534 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |

| | |
|---|---|
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $574,541 |
| **C. Fringe Benefits** | $38,191 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $612,732 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $14,200 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $87,406 |
| Publication Costs | $1,183 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $367,724 |
| Other | $160,419 |
| *Total Other Direct Costs (G)* | $616,732 |
| **H. Total Direct Costs (A Through G)** | **$1,243,664** |
| **I. Indirect Costs*** | **$531,336** |
| **J. Total Direct and Indirect Costs (H + I)** | $1,775,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$1,775,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

| | |
|---|---|
| MTDC - Wyss | 89.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2425714
**Managing Division Abbreviation:** RISE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/29/2024
**Amendment Number:** 000
**Proposal Number:** 2425714
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2425714
**Award Instrument:** Standard Grant
**Award Date:** 08/29/2024
**Award Period of Performance:** Start Date: 09/15/2024 End Date: 08/31/2027
**Project Title:** Collaborative Research: CAIG: A Large Foundational Model for Earthquake Understanding
**Managing Division Abbreviation:** RISE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 24-518 Collaborations in Artificial Intelligence and Geosciences
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $452,604
**Total Intended Award Amount:** $452,604
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $452,604
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2425714 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2425715 | N | [redacted] | Trustees of Boston University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Andrew Alexander Zaffos
**Email:** azaffos@nsf.gov
**Phone:** (703) 292-4938

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-518 Collaborations in Artificial Intelligence and Geosciences.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.65 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $10,324 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 2.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $67,954 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $160,727 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $239,005 |
| **C. Fringe Benefits** | $16,830 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $255,835 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $5,978 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $6,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $6,000 |
| **H. Total Direct Costs (A Through G)** | **$267,813** |
| **I. Indirect Costs*** | **$184,791** |
| **J. Total Direct and Indirect Costs (H + I)** | $452,604 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$452,604** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Department costs | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2426105
**Managing Division Abbreviation:** MCB **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/01/2024
**Amendment Number:** 000
**Proposal Number:** 2426105
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/17/2024.

## AWARD INFORMATION

**Award Number (FAIN):** 2426105
**Award Instrument:** Standard Grant
**Award Date:** 08/01/2024
**Award Period of Performance:** Start Date: 08/01/2024 End Date: 07/31/2028
**Project Title:** Understanding within-cell plasmid evolution with synthetic systems
**Managing Division Abbreviation:** MCB
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 24-539 Division of Molecular and Cellular Biosciences Core Programs
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $1,100,000

**Total Intended Award Amount:** $1,100,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $1,100,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Bianca Garner
**Email:** bgarner@nsf.gov
**Phone:** (703) 292-7587

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-539 Division of Molecular and Cellular Biosciences Core Programs.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 4.00 |
| Senior Personnel Calendar Months | 4.80 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $81,170 |
| **B. Other Personnel** | |

| | |
|---|---|
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 4.00 |
| Post Doctoral Calendar Months | 33.60 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $222,569 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 4.00 |
| Graduate Students Amount | $133,238 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $436,977 |
| **C. Fringe Benefits** | $67,126 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $504,103 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $6,000 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |

| | |
|---|---|
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $113,768 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $42,540 |
| *Total Other Direct Costs (G)* | $156,308 |
| **H. Total Direct Costs (A Through G)** | **$666,411** |
| **I. Indirect Costs*** | **$433,589** |
| **J. Total Direct and Indirect Costs (H + I)** | $1,100,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$1,100,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2426145

**Managing Division Abbreviation:** AGS

**Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Other Admin No Fund Actions
**Amendment Date:** 12/20/2024
**Amendment Number:** 001
**Proposal Number:** Not Applicable
**Amendment Description:**

The purpose of this amendment is to change the PI or co-PI in accordance with the Change PI and Add/Change Co-PI request submitted on 12/19/2024. Effective with this amendment, the project is now under the direction of [redacted]

Except as modified by this amendment, the award conditions remain unchanged.

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Staci Jenkins
**Email:** sjenkins@nsf.gov
**Phone:** (703) 292-5042

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Sylvia Edgerton
**Email:** sedgerto@nsf.gov
**Phone:** (703) 292-8522

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2426145
**Managing Division Abbreviation:** AGS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 04/23/2024
**Amendment Number:** 000
**Proposal Number:** 2426145
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2426145
**Award Instrument:** Standard Grant
**Award Date:** 04/23/2024
**Award Period of Performance:** Start Date: 06/01/2024 End Date: 05/31/2025
**Project Title:** RAPID: Ongoing Impacts of the Extraordinary Hunga Tonga Volcanic Eruption on the Stratosphere
**Managing Division Abbreviation:** AGS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 23-1524 Atmospheric Chemistry
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $199,479
**Total Intended Award Amount:** $199,479
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $199,479
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Staci Jenkins
**Email:** sjenkins@nsf.gov
**Phone:** (703) 292-5042

**Awarding Official**
**Name:** Staci Jenkins
**Email:** sjenkins@nsf.gov

**Managing Program Officer**
**Name:** Sylvia Edgerton
**Email:** sedgerto@nsf.gov
**Phone:** (703) 292-8522

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 4.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $43,426 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |

| | |
|---|---|
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 1.00 |
| Other Professionals Calendar Months | 1.75 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $16,483 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $24,744 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $84,653 |
| **C. Fringe Benefits** | $21,479 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $106,132 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $2,952 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |

| G. Other Direct Costs | |
|---|---|
| Materials Supplies | $0 |
| Publication Costs | $3,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $10,057 |
| *Total Other Direct Costs (G)* | $13,057 |
| **H. Total Direct Costs (A Through G)** | **$122,141** |
| **I. Indirect Costs*** | **$77,338** |
| **J. Total Direct and Indirect Costs (H + I)** | $199,479 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$199,479** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| IDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2426448

**Managing Division Abbreviation:** EAR

**Amendment Number:** 002

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Other Admin No Fund Actions
**Amendment Date:** 10/04/2024
**Amendment Number:** 002
**Proposal Number:** Not Applicable
**Amendment Description:**

The purpose of this amendment is to approve the Pre-award Costs in Excess of 90 Days in accordance with the request submitted on 10/02/2024. Reimbursement of pre-award costs is authorized, up to $2,190 and not earlier than July 1, 2023.

Except as modified by this amendment, the award conditions remain unchanged.

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Awarding Official**
**Name:** Willie M. Powell
**Email:** wpowell@nsf.gov

**Managing Program Officer**
**Name:** Yurena Yanes
**Email:** yyanes@nsf.gov
**Phone:** (703) 292-2649

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2426448
**Managing Division Abbreviation:** EAR **Amendment Number:** 000

## ORIGINAL AWARD INFORMATION

**Recipient (Legal Business Name):** THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK
**Recipient Address:** 615 W 131ST ST MC 8741 NEW YORK, NY 10027-7922
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** F4N1QNPB95M4

**Award Number (FAIN):** 1945446
**Award Period of Performance:** Start Date: 07/01/2020 End Date: 06/30/2025
**Revised End Date:** 05/31/2024

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** PI Transfer
**Amendment Date:** 05/02/2024
**Amendment Number:** 000
**Proposal Number:** 2426448
**Amendment Description:**

The award transfer referenced in this notice has been approved by NSF. Acceptance of this transfer award constitutes the recipient organization's agreement to assume responsibility for completion of the project effort and to administer the award from the agreed upon transfer date, noted on the NSF Grant Transfer Request, to completion of the project in accordance with any award-specific terms and conditions and the general terms and conditions contained in this notice.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies

and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2426448
**Award Instrument:** Continuing Grant
**Award Date:** 05/02/2024
**Award Period of Performance:** Start Date: 10/01/2023 End Date: 08/31/2025
**Project Title:** CAREER: Developing novel biomarker proxies to constrain Neogene changes in African woody cover and paleoecological contexts of hominin evolution
**Managing Division Abbreviation:** EAR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 17-537 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.050 Geosciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $398,195
**Total Intended Award Amount:** $699,527
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $398,195

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Awarding Official**
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov

**Managing Program Officer**
**Name:** Yurena Yanes
**Email:** yyanes@nsf.gov
**Phone:** (703) 292-2649

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 17-537 Faculty Early Career Development Program.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 2.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $60,913 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $49,000 |
| **Undergraduate Students** | |

| | |
|---|---|
| Undergraduate Students Count | 1.00 |
| Undergraduate Students Amount | $3,451 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 1.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $113,364 |
| **C. Fringe Benefits** | $13,096 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $126,460 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $7,550 |
| International | $17,106 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 12.00 |
| *Total Participant Costs (F)* | $60,000 |
| **G. Other Direct Costs** | |
| Materials Supplies | $6,000 |
| Publication Costs | $3,000 |
| Consultant Services | $0 |
| Computer Services | $40,000 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $49,000 |
| **H. Total Direct Costs (A Through G)** | **$260,116** |
| **I. Indirect Costs*** | **$138,079** |
| **J. Total Direct and Indirect Costs (H + I)** | $398,195 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$398,195** |
| **M. Cost Sharing Proposed Level** | $0 |

Total Amount of Request

The **Total Amount of Request** (Budget Line L) may differ from the **Amount Obligated by this Amendment** (Funding Information section) due to rounding. The **Amount Obligated by this Amendment** is the amount obligated in the NSF financial system for this award.

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| 138079 | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2427124
**Managing Division Abbreviation:** IIS **Amendment Number:** 000

### ORIGINAL AWARD INFORMATION

**Recipient (Legal Business Name):** ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI
**Recipient Address:** 1 GUSTAVE L LEVY PL NEW YORK, NY 10029-6504
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** C8H9CNG1VBD9

**Award Number (FAIN):** 2046583
**Award Period of Performance:** Start Date: 09/01/2021 End Date: 08/31/2026
**Revised End Date:** 06/30/2024

### RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

### AMENDMENT INFORMATION

**Amendment Type:** PI Transfer
**Amendment Date:** 05/08/2024
**Amendment Number:** 000
**Proposal Number:** 2427124
**Amendment Description:**

The award transfer referenced in this notice has been approved by NSF. Acceptance of this transfer award constitutes the recipient organization's agreement to assume responsibility for completion of the project effort and to administer the award from the agreed upon transfer date, noted on the NSF Grant Transfer Request, to completion of the project in accordance with any award-specific terms and conditions and the general terms and conditions contained in this notice.

### AWARD INFORMATION

**Award Number (FAIN):** 2427124
**Award Instrument:** Continuing Grant

**Award Date:** 05/08/2024
**Award Period of Performance:** Start Date: 10/01/2023 End Date: 08/31/2026
**Project Title:** CAREER: Untangling Inter-Area Communication in the Brain Using Multi-Region Neural Networks
**Managing Division Abbreviation:** IIS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 20-525 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $351,588
**Total Intended Award Amount:** $549,323
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $351,588

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tianay M. Robinson
**Email:** trobinso@nsf.gov
**Phone:** (703) 292-7859

**Awarding Official**
**Name:** Jannele L. Gosey
**Email:** jgosey@nsf.gov

**Managing Program Officer**
**Name:** Kenneth C. Whang
**Email:** kwhang@nsf.gov
**Phone:** (703) 292-5149

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 20-525 Faculty Early Career Development Program.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.20 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $57,000 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 4.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $94,341 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $151,341 |
| **C. Fringe Benefits** | $32,085 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $183,426 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $4,500 |
| International | $3,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $6,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $10,500 |
| *Total Other Direct Costs (G)* | $16,500 |
| **H. Total Direct Costs (A Through G)** | **$207,426** |
| **I. Indirect Costs*** | **$144,162** |
| **J. Total Direct and Indirect Costs (H + I)** | $351,588 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$351,588** |
| **M. Cost Sharing Proposed Level** | $0 |

Total Amount of Request

The **Total Amount of Request** (Budget Line L) may differ from the **Amount Obligated by this Amendment** (Funding Information section) due to rounding. The **Amount Obligated by this Amendment** is the amount obligated in the NSF financial system for this award.

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal

& Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2427291

**Managing Division Abbreviation:** OPP

**Amendment Number:** 001

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** Other Admin No Fund Actions
**Amendment Date:** 12/08/2024
**Amendment Number:** 001
**Proposal Number:** Not Applicable
**Amendment Description:**

The purpose of this amendment is to authorize the awardee to enter into the proposed subaward agreement in accordance with the Subawarding, Transferring or Contracting Out Part of an NSF Award request submitted on 10/30/2024.

The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

Except as modified by this amendment, the award conditions remain unchanged.

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov

**Awarding Official**
**Name:** Angela A. Turner
**Email:** aturner@nsf.gov

**Managing Program Officer**
**Name:** Roberto Delgado
**Email:** robdelga@nsf.gov

| | |
|---|---|
| **Phone:** (703) 292-7524 | **Phone:** (703) 292-2397 |

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2427291
**Managing Division Abbreviation:** OPP **Amendment Number:** 000

## ORIGINAL AWARD INFORMATION

**Recipient (Legal Business Name):** AURORA FLIGHT SCIENCES CORPORATION
**Recipient Address:** 9950 WAKEMAN DR MANASSAS, VA 20110-2702
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** K1L1BZLNPWC4

**Award Number (FAIN):** 1855928
**Award Period of Performance:** Start Date: 01/01/2021 End Date: 12/31/2024
**Revised End Date:** 05/31/2024

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** PI Transfer
**Amendment Date:** 04/16/2024
**Amendment Number:** 000
**Proposal Number:** 2427291
**Amendment Description:**

The award transfer referenced in this notice has been approved by NSF. Acceptance of this transfer award constitutes the recipient organization's agreement to assume responsibility for completion of the project effort and to administer the award from the agreed upon transfer date, noted on the NSF Grant Transfer Request, to completion of the project in accordance with any award-specific terms and conditions and the general terms and conditions contained in this notice.

Please read the components carefully as they outline specific requirements for receiving this funding.

1. Principal investigators and their teams are required to comply with the OPP Data Management Policy (NSF 22-106) (https://www.nsf.gov/pubs/2022/nsf22106/nsf22106.jsp) and evidence of compliance is required in annual and final project reports. In all project reports submitted to NSF, principal investigators must address the status of storing metadata files, physical/biological/archaeological samples, full data sets, and derived data products into long-lived and publicly accessible archive(s).

2. Participants in research supported by NSF are expected to follow the 2018 Principles for Conducting Research in the Arctic (https://www.nsf.gov/geo/opp/arctic/conduct.jsp) adopted by the U.S. Interagency Arctic Research Policy Committee (IARPC). Investigators may find useful these resources from NSF and resources (https://www.nsf.gov/geo/opp/arctic/ace/) from ARCUS (https://www.arcus.org/resources/northern-communities).

3. Principal Investigators are expected to specifically address progress on activities related to proposed Broader Impacts and any postdoctoral mentoring in annual and final reports.

4. As part of the Office of Polar Programs efforts to increase diversity and inclusion in the Antarctic, please seek to recruit qualified students and others working on your project from historically underrepresented groups in STEM, e.g., women, minorities, persons with disabilities, LGBTQ+ students and veterans. Diversifying and broadening participation is a priority for the Arctic Sciences Section.

## AWARD INFORMATION

**Award Number (FAIN):** 2427291
**Award Instrument:** Continuing Grant
**Award Date:** 04/16/2024
**Award Period of Performance:** Start Date: 03/15/2024 End Date: 12/31/2024
**Project Title:** Collaborative Research: Bridging the scale gap between local and regional methane and carbon dioxide isotopic fluxes in the Arctic
**Managing Division Abbreviation:** OPP
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 16-595 Arctic Research Opportunities
**Assistance Listing Number(s) and Name(s):** 47.078 Polar Programs (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $805,625
**Total Intended Award Amount:** $805,625
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $805,625

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

| Managing Grants Official (Primary Contact) | Awarding Official | Managing Program Officer |
|---|---|---|
| | **Name:** Angela A. Turner | **Name:** Roberto Delgado |

**Name:** Angela A. Turner
**Email:** aturner@nsf.gov
**Phone:** (703) 292-7524

**Email:** aturner@nsf.gov

**Email:** robdelga@nsf.gov
**Phone:** (703) 292-2397

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 16-595 Arctic Research Opportunities.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 10.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $105,729 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |

| | |
|---|---|
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 2.00 |
| Other Amount | $153,202 |
| *Total Salaries and Wages (A+B)* | $258,931 |
| **C. Fringe Benefits** | $86,004 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $344,935 |
| **D. Equipment** | $121,573 |
| **E. Travel** | |
| Domestic | $41,830 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $10,000 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $8,000 |
| *Total Other Direct Costs (G)* | $18,000 |
| **H. Total Direct Costs (A Through G)** | **$526,338** |
| **I. Indirect Costs*** | **$279,287** |
| **J. Total Direct and Indirect Costs (H + I)** | $805,625 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J)** | **$805,625** |

| | |
|---|---|
| **OR (J + K)** | |
| **M. Cost Sharing Proposed Level** | $0 |

Total Amount of Request

The **Total Amount of Request** (Budget Line L) may differ from the **Amount Obligated by this Amendment** (Funding Information section) due to rounding. The **Amount Obligated by this Amendment** is the amount obligated in the NSF financial system for this award.

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| 279288 | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2427533
**Managing Division Abbreviation:** ITE **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 09/18/2024
**Amendment Number:** 000
**Proposal Number:** 2427533
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2427533
**Award Instrument:** Standard Grant
**Award Date:** 09/18/2024
**Award Period of Performance:** Start Date: 10/01/2024 End Date: 03/31/2026
**Project Title:** ReDDDoT Phase 1: Planning Grant: Piloting an impact accelerator model for cultivating equity and ethics in genetics innovation
**Managing Division Abbreviation:** ITE
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 24-524 Responsible Design, Development, and Deployment of Technologies
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $299,993
**Total Intended Award Amount:** $299,993
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $299,993
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Malia Williams
**Email:** malwilli@nsf.gov
**Phone:** (703) 292-2290

**Awarding Official**
**Name:** Malia Williams
**Email:** malwilli@nsf.gov

**Managing Program Officer**
**Name:** Danielle Frances Sumy
**Email:** dsumy@nsf.gov
**Phone:** (703) 292-4217

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-524 Responsible Design, Development, and Deployment of Technologies.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 4.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $37,508 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 2.00 |
| Other Professionals Calendar Months | 3.33 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $25,810 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $63,318 |

| | |
|---|---|
| **C. Fringe Benefits** | $13,424 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $76,742 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $5,360 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $8,250 |
| Participant Support Costs Travel | $550 |
| Participant Support Costs Subsistence | $1,350 |
| Participant Support Costs Other | $2,000 |
| Total Number of Participants | 52.00 |
| *Total Participant Costs (F)* | $12,150 |
| **G. Other Direct Costs** | |
| Materials Supplies | $1,000 |
| Publication Costs | $0 |
| Consultant Services | $122,500 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $123,500 |
| **H. Total Direct Costs (A Through G)** | **$217,752** |
| **I. Indirect Costs*** | **$82,241** |
| **J. Total Direct and Indirect Costs (H + I)** | $299,993 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$299,993** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2430375
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 01/03/2025
**Amendment Number:** 000
**Proposal Number:** 2430375
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2430375
**Award Instrument:** Standard Grant
**Award Date:** 01/03/2025
**Award Period of Performance:** Start Date: 01/15/2025 End Date: 12/31/2027
**Project Title:** FET: Small: A complexity theoretic lens on near- and medium-term quantum devices
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-561 Computer and Information Science and Engineering (CISE): Core Programs
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $600,000
**Total Intended Award Amount:** $600,000

**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $600,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov
**Phone:** (703) 292-8709

**Awarding Official**
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov

**Managing Program Officer**
**Name:** Elizabeth Behrman
**Email:** ebehrman@nsf.gov
**Phone:** (703) 292-7049

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-561 Computer and Information Science and Engineering (CISE): Core Programs.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 6.00 |
| Senior Personnel Calendar Months | 6.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |

| | |
|---|---|
| Senior Personnel Amount | $102,880 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $70,496 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 2.00 |
| Graduate Students Amount | $105,329 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $278,705 |
| **C. Fringe Benefits** | $37,276 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $315,981 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $8,000 |
| International | $5,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |

| | |
|---|---|
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $2,694 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $39,469 |
| *Total Other Direct Costs (G)* | $42,163 |
| **H. Total Direct Costs (A Through G)** | **$371,144** |
| **I. Indirect Costs*** | **$228,856** |
| **J. Total Direct and Indirect Costs (H + I)** | $600,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$600,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2432024
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/26/2024
**Amendment Number:** 000
**Proposal Number:** 2432024
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special_conditions.jsp.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2432024
**Award Instrument:** Standard Grant
**Award Date:** 07/26/2024
**Award Period of Performance:** Start Date: 08/01/2024 End Date: 07/31/2025
**Project Title:** Conference: Advances in probability theory and interacting particle systems
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-541 Conferences and Workshops in the Mathematical Sciences
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences
(Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $37,500
**Total Intended Award Amount:** $37,500
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $37,500
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** NEW YORK UNIVERSITY

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Tomek Bartoszynski
**Email:** tbartosz@nsf.gov
**Phone:** (703) 292-4885

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-541 Conferences and Workshops in the Mathematical Sciences.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |

| | |
|---|---|
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $37,500 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 30.00 |
| *Total Participant Costs (F)* | $37,500 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$37,500** |
| **I. Indirect Costs*** | **$0** |
| **J. Total Direct and Indirect Costs (H + I)** | $37,500 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$37,500** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2434664
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/20/2024
**Amendment Number:** 000
**Proposal Number:** 2434664
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2434664
**Award Instrument:** Standard Grant
**Award Date:** 08/20/2024
**Award Period of Performance:** Start Date: 09/15/2024 End Date: 08/31/2027
**Project Title:** Collaborative Research: AIMING: AI Tools to Knowledge Discovery and Rigorous Reasoning in Polyhedral Geometry
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 24-554 Artificial Intelligence, Formal Methods, and Mathematical Reasoning
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $497,523
**Total Intended Award Amount:** $497,523
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $497,523
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2434664 | Y | [redacted] | Harvard College, President & Fellows of Harvard University |
| 2434665 | N | [redacted] | University of California, Davis |
| 2434666 | N | [redacted] | Duke University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Jun Zhu
**Email:** jzhu@nsf.gov
**Phone:** (703) 292-4551

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-554 Artificial Intelligence, Formal Methods, and Mathematical Reasoning.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 3.60 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $54,775 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 2.00 |
| Post Doctoral Calendar Months | 24.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $172,104 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $226,879 |

| | |
|---|---|
| **C. Fringe Benefits** | $51,047 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $277,926 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $11,000 |
| International | $6,000 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $2,000 |
| Consultant Services | $0 |
| Computer Services | $15,000 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $17,000 |
| **H. Total Direct Costs (A Through G)** | **$311,926** |
| **I. Indirect Costs*** | **$185,597** |
| **J. Total Direct and Indirect Costs (H + I)** | $497,523 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$497,523** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 59.5000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2434879
**Managing Division Abbreviation:** MCB **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 07/22/2024
**Amendment Number:** 000
**Proposal Number:** 2434879
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2434879
**Award Instrument:** Continuing Grant
**Award Date:** 07/22/2024
**Award Period of Performance:** Start Date: 07/15/2024 End Date: 06/30/2028
**Project Title:** NSF-SNSF: AN INTEGRATIVE STRUCTURAL AND FUNCTIONAL STUDY TO DISSECT THE REGULATORY MECHANISMS OF CILIARY MOTILITY
**Managing Division Abbreviation:** MCB
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 24-539 Division of Molecular and Cellular Biosciences Core Programs
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $291,710
**Total Intended Award Amount:** $1,199,870
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $291,710
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2025 | $306,236 |
| 2026 | $293,671 |
| 2027 | $308,253 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Loretta Jackson-Hayes
**Email:** lojackso@nsf.gov
**Phone:** (703) 292-4286

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-539 Division of Molecular and Cellular Biosciences Core Programs.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |

| | |
|---|---|
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $15,672 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $76,000 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $91,672 |
| **C. Fringe Benefits** | $19,434 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $111,106 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |

| | |
|---|---|
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $40,594 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $20,400 |
| *Total Other Direct Costs (G)* | $60,994 |
| **H. Total Direct Costs (A Through G)** | **$172,100** |
| **I. Indirect Costs*** | **$119,610** |
| **J. Total Direct and Indirect Costs (H + I)** | $291,710 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$291,710** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2437125
**Managing Division Abbreviation:** DEB **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/21/2025
**Amendment Number:** 000
**Proposal Number:** 2437125
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2437125
**Award Instrument:** Standard Grant
**Award Date:** 02/21/2025
**Award Period of Performance:** Start Date: 07/01/2025 End Date: 06/30/2028
**Project Title:** Collaborative Research: Termite Methane Emissions Across Tropical Savannas and Forests
**Managing Division Abbreviation:** DEB
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 24-543 Division of Environmental Biology (core programs)
**Assistance Listing Number(s) and Name(s):** 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $639,227
**Total Intended Award Amount:** $639,227
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $639,227
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2437124 | Y | [redacted] | Utah State University |
| 2437125 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Sharon D. Glivens
**Email:** sglivens@nsf.gov
**Phone:** (703) 292-7837

**Awarding Official**
**Name:** Vanessa L. Richardson
**Email:** vlrichar@nsf.gov

**Managing Program Officer**
**Name:** Matthew D. Kane
**Email:** mkane@nsf.gov
**Phone:** (703) 292-7186

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-543 Division of Environmental Biology (core programs).

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 3.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $42,838 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 2.00 |
| Post Doctoral Calendar Months | 24.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $149,157 |
| **Other Professionals** | |
| Other Professionals Count | 2.00 |
| Other Professionals Calendar Months | 9.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $47,500 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $239,495 |
| **C. Fringe Benefits** | $62,526 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $302,021 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $4,600 |
| International | $13,120 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $3,500 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $55,000 |
| *Total Other Direct Costs (G)* | $58,500 |
| **H. Total Direct Costs (A Through G)** | **$378,241** |
| **I. Indirect Costs*** | **$260,986** |
| **J. Total Direct and Indirect Costs (H + I)** | $639,227 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$639,227** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Modified Total Direct Cost - MTDC | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2437498
**Managing Division Abbreviation:** BCS **Amendment Number:** 000

### RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

### AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/11/2025
**Amendment Number:** 000
**Proposal Number:** 2437498
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

### AWARD INFORMATION

**Award Number (FAIN):** 2437498
**Award Instrument:** Standard Grant
**Award Date:** 02/11/2025
**Award Period of Performance:** Start Date: 06/01/2025 End Date: 05/31/2029
**Project Title:** Collaborative Research: Tracing the Rise of Equine Dairying
**Managing Division Abbreviation:** BCS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-566 Archaeology Program Senior Research Awards
**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (Predominant source of funding for SEFA reporting)

### FUNDING INFORMATION

**Amount Obligated by this Amendment:** $188,200
**Total Intended Award Amount:** $188,200
**Total Approved Cost Share or Matching Amount:** $0

**Total Amount Obligated to Date:** $188,200
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## COLLABORATIVE INFORMATION

| Proposal ID | Lead | PI Name | Organization |
|---|---|---|---|
| 2437497 | Y | [redacted] | University of Arkansas |
| 2437498 | N | [redacted] | Harvard College, President & Fellows of Harvard University |

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov
**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov

**Managing Program Officer**
**Name:** John E. Yellen
**Email:** jyellen@nsf.gov
**Phone:** (703) 292-8759

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-566 Archaeology Program Senior Research Awards.

## BUDGET

**A. Senior Personnel**

| | |
|---|---|
| Senior Personnel Count | 3.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 2.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $70,672 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 2.00 |
| Undergraduate Students Amount | $10,000 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $80,672 |
| **C. Fringe Benefits** | $15,689 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $96,361 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $2,500 |
| **F. Participant Support Costs** | |

| | |
|---|---|
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $11,000 |
| Publication Costs | $1,500 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $12,500 |
| **H. Total Direct Costs (A Through G)** | **$111,361** |
| **I. Indirect Costs*** | **$76,839** |
| **J. Total Direct and Indirect Costs (H + I)** | $188,200 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$188,200** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Modified Total Direct Costs | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2439922
**Managing Division Abbreviation:** ECCS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 08/12/2024
**Amendment Number:** 000
**Proposal Number:** 2439922
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2439922
**Award Instrument:** Standard Grant
**Award Date:** 08/12/2024
**Award Period of Performance:** Start Date: 09/01/2024 End Date: 08/31/2026
**Project Title:** EAGER: Active Metamaterials for Computing Applications
**Managing Division Abbreviation:** ECCS
**Research and Development Award:** Yes
**Funding Opportunity:** PD 18-1517 Electronics, Photonics and Magnetic Devices
**Assistance Listing Number(s) and Name(s):** 47.041 Engineering Grants (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $240,000

**Total Intended Award Amount:** $240,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $240,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Malia Williams
**Email:** malwilli@nsf.gov
**Phone:** (703) 292-2290

**Awarding Official**
**Name:** Malia Williams
**Email:** malwilli@nsf.gov

**Managing Program Officer**
**Name:** Seongsin Kim
**Email:** sekim@nsf.gov
**Phone:** (703) 292-2967

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| **A. Senior Personnel** | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 1.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $15,236 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |

| | |
|---|---|
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 3.00 |
| Graduate Students Amount | $86,944 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $102,180 |
| **C. Fringe Benefits** | $3,383 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $105,563 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $1,500 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |

| | |
|---|---|
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $13,779 |
| Subawards | $0 |
| Other | $35,777 |
| *Total Other Direct Costs (G)* | $49,556 |
| **H. Total Direct Costs (A Through G)** | **$156,619** |
| **I. Indirect Costs*** | **$83,381** |
| **J. Total Direct and Indirect Costs (H + I)** | $240,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$240,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| F&A | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2440824
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

### RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

### AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/10/2025
**Amendment Number:** 000
**Proposal Number:** 2440824
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 12/03/2024.

### AWARD INFORMATION

**Award Number (FAIN):** 2440824
**Award Instrument:** Continuing Grant
**Award Date:** 02/10/2025
**Award Period of Performance:** Start Date: 07/01/2025 End Date: 06/30/2030
**Project Title:** CAREER: High-Dimensional Learning and Inference from Heterogeneous Data Sources
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences
(Predominant source of funding for SEFA reporting)

### FUNDING INFORMATION

**Amount Obligated by this Amendment:** $88,793
**Total Intended Award Amount:** $450,000
**Total Approved Cost Share or Matching Amount:** $0

**Total Amount Obligated to Date:** $88,793
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2026 | $85,224 |
| 2027 | $88,521 |
| 2028 | $91,949 |
| 2029 | $95,513 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Tapabrata Maiti
**Email:** tmaiti@nsf.gov
**Phone:** (703) 292-5307

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 1.50 |
| Senior Personnel Academic Months | 0.00 |

| | |
|---|---|
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $26,121 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $14,435 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $40,556 |
| **C. Fringe Benefits** | $5,799 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $46,355 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $1,641 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |

| | |
|---|---|
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $4,000 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $700 |
| *Total Other Direct Costs (G)* | $4,700 |
| **H. Total Direct Costs (A Through G)** | **$52,696** |
| **I. Indirect Costs*** | **$36,097** |
| **J. Total Direct and Indirect Costs (H + I)** | $88,793 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$88,793** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2441781
**Managing Division Abbreviation:** DMR **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 11/18/2024
**Amendment Number:** 000
**Proposal Number:** 2441781
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 11/06/2024.

Fiscal Year 2025 and 2026 budgets have been combined in this award. It is still the grantees responsibility to submit an annual project report in accordance with the award terms and conditions.

## AWARD INFORMATION

**Award Number (FAIN):** 2441781
**Award Instrument:** Continuing Grant
**Award Date:** 11/18/2024
**Award Period of Performance:** Start Date: 04/01/2025 End Date: 03/31/2030
**Project Title:** CAREER: Interacting Topological Bands in Moire Superlattices and Beyond
**Managing Division Abbreviation:** DMR
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $260,000
**Total Intended Award Amount:** $650,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $260,000
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2027 | $130,000 |
| 2028 | $130,000 |
| 2029 | $130,000 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov
**Phone:** (703) 292-4444

**Awarding Official**
**Name:** Elizabeth Gebremedhin
**Email:** egebreme@nsf.gov

**Managing Program Officer**
**Name:** Alexios Klironomos
**Email:** aklirono@nsf.gov
**Phone:** (703) 292-4920

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar | 2.00 |

| | |
|---|---|
| Months | |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $28,888 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $77,583 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $106,471 |
| **C. Fringe Benefits** | $6,413 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $112,884 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $600 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |

| | |
|---|---|
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $21,376 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $32,087 |
| *Total Other Direct Costs (G)* | $53,463 |
| **H. Total Direct Costs (A Through G)** | **$166,947** |
| **I. Indirect Costs*** | **$93,053** |
| **J. Total Direct and Indirect Costs (H + I)** | $260,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$260,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2443033
**Managing Division Abbreviation:** CCF **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 01/02/2025
**Amendment Number:** 000
**Proposal Number:** 2443033
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 11/27/2024.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2443033
**Award Instrument:** Continuing Grant
**Award Date:** 01/02/2025
**Award Period of Performance:** Start Date: 01/15/2025 End Date: 12/31/2029
**Project Title:** CAREER: CO2-Efficient Computing: Quantifying Trade-Offs in Power, Performance, Area, and Total Carbon Footprint of Monolithic Three-Dimensional Integrated Circuits
**Managing Division Abbreviation:** CCF
**Research and Development Award:** Yes

**Funding Opportunity:** NSF 22-586 Faculty Early Career Development Program
**Assistance Listing Number(s) and Name(s):** 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $130,134
**Total Intended Award Amount:** $600,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $130,134
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2026 | $134,082 |
| 2027 | $123,582 |
| 2028 | $111,902 |
| 2029 | $100,300 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov
**Phone:** (703) 292-8709

**Awarding Official**
**Name:** Cartia Brown-Morgan
**Email:** cbrownmo@nsf.gov

**Managing Program Officer**
**Name:** Sankar Basu
**Email:** sabasu@nsf.gov
**Phone:** (703) 292-7843

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.75 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $11,301 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 1.00 |
| Graduate Students Amount | $49,613 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $60,914 |
| **C. Fringe Benefits** | $2,509 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $63,423 |
| **D. Equipment** | $0 |

| | |
|---|---|
| **E. Travel** | |
| Domestic | $1,500 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $20,415 |
| *Total Other Direct Costs (G)* | $20,415 |
| **H. Total Direct Costs (A Through G)** | **$85,338** |
| **I. Indirect Costs*** | **$44,796** |
| **J. Total Direct and Indirect Costs (H + I)** | $130,134 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$130,134** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2451960
**Managing Division Abbreviation:** ECCS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 12/18/2024
**Amendment Number:** 000
**Proposal Number:** 2451960
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special_conditions.jsp.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2451960
**Award Instrument:** Standard Grant
**Award Date:** 12/18/2024
**Award Period of Performance:** Start Date: 01/01/2025 End Date: 09/30/2025
**Project Title:** Travel Grant: Reinforcement Learning: from Theorem to Real-World
**Managing Division Abbreviation:** ECCS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 24-1 Proposal & Award Policies & Procedures Guide - PAPPG
**Assistance Listing Number(s) and Name(s):** 47.041 Engineering Grants (Predominant source of funding for SEFA reporting), 47.070 Computer and Information Science and Engineering

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $100,000
**Total Intended Award Amount:** $100,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $100,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted] **Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Malia Williams
**Email:** malwilli@nsf.gov
**Phone:** (703) 292-2290

**Awarding Official**
**Name:** Malia Williams
**Email:** malwilli@nsf.gov

**Managing Program Officer**
**Name:** Eyad Abed
**Email:** eabed@nsf.gov
**Phone:** (703) 292-2303

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

## BUDGET

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $0 |

| F. Participant Support Costs | |
|---|---|
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $93,000 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 60.00 |
| *Total Participant Costs (F)* | $93,000 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $5,224 |
| *Total Other Direct Costs (G)* | $5,224 |
| **H. Total Direct Costs (A Through G)** | **$98,224** |
| **I. Indirect Costs*** | **$1,776** |
| **J. Total Direct and Indirect Costs (H + I)** | $100,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$100,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| MTDC | 34.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2502675
**Managing Division Abbreviation:** DMS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/13/2025
**Amendment Number:** 000
**Proposal Number:** 2502675
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special_conditions.jsp.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

## AWARD INFORMATION

**Award Number (FAIN):** 2502675
**Award Instrument:** Standard Grant
**Award Date:** 02/13/2025
**Award Period of Performance:** Start Date: 03/01/2025 End Date: 02/28/2026
**Project Title:** Conference: The Legacy of John Tate, and Beyond
**Managing Division Abbreviation:** DMS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 21-541 Conferences and Workshops in the Mathematical Sciences
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $43,000
**Total Intended Award Amount:** $43,000
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $43,000
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator** [redacted] **Email:** [redacted] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov
**Phone:** (703) 292-7721

**Awarding Official**
**Name:** Lynda Kummelt
**Email:** lkummelt@nsf.gov

**Managing Program Officer**
**Name:** Andrew D. Pollington
**Email:** adpollin@nsf.gov
**Phone:** (703) 292-4878

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-541 Conferences and Workshops in the Mathematical Sciences.

**BUDGET**

| | |
|---|---|
| **A. Senior Personnel** | |
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |

| | |
|---|---|
| Domestic | $0 |
| International | $0 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $43,000 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 23.00 |
| *Total Participant Costs (F)* | $43,000 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$43,000** |
| **I. Indirect Costs*** | **$0** |
| **J. Total Direct and Indirect Costs (H + I)** | $43,000 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$43,000** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2505370
**Managing Division Abbreviation:** BCS **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 03/04/2025
**Amendment Number:** 000
**Proposal Number:** 2505370
**Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2505370
**Award Instrument:** Standard Grant
**Award Date:** 03/04/2025
**Award Period of Performance:** Start Date: 03/15/2025 End Date: 08/31/2026
**Project Title:** Doctoral Dissertation Research: Multi-sited Geophysical Archaeology for the Study of Rural Settlement Change and Continuity
**Managing Division Abbreviation:** BCS
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-531 Archaeology Program - Doctoral Dissertation Research Improvement Grants
**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $31,089

**Total Intended Award Amount:** $31,089
**Total Approved Cost Share or Matching Amount:** $0
**Total Amount Obligated to Date:** $31,089
**Expenditure Limitation:** Not Applicable

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

**co-Principal Investigator:** [redacted]
**Email:** [redacted]
**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official**
(Primary Contact)
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov
**Phone:** (703) 292-7046

**Awarding Official**
**Name:** Tyffani N. Smith
**Email:** tnsmith@nsf.gov

**Managing Program Officer**
**Name:** John E. Yellen
**Email:** jyellen@nsf.gov
**Phone:** (703) 292-8759

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-531 Archaeology Program - Doctoral Dissertation Research Improvement Grants.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 2.00 |
| Senior Personnel Calendar Months | 0.00 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer Months | 0.00 |

| | |
|---|---|
| Senior Personnel Amount | $0 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 0.00 |
| Post Doctoral Calendar Months | 0.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $0 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $0 |
| **C. Fringe Benefits** | $0 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $0 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $4,944 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |

| | |
|---|---|
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $200 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $19,530 |
| *Total Other Direct Costs (G)* | $19,730 |
| **H. Total Direct Costs (A Through G)** | **$24,674** |
| **I. Indirect Costs*** | **$6,415** |
| **J. Total Direct and Indirect Costs (H + I)** | $31,089 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$31,089** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| Modified Total Direct Costs | 26.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# NATIONAL SCIENCE FOUNDATION

## Award Notice

**Award Number (FAIN):** 2514823
**Managing Division Abbreviation:** PHY **Amendment Number:** 000

## RECIPIENT INFORMATION

**Recipient (Legal Business Name):** PRESIDENT AND FELLOWS OF HARVARD COLLEGE
**Recipient Address:** 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366
**Official Recipient Email Address:** [redacted]
**Unique Entity Identifier (UEI):** LN53LCFJFL45

## AMENDMENT INFORMATION

**Amendment Type:** New Project
**Amendment Date:** 02/12/2025
**Amendment Number:** 000
**Proposal Number:** 2514823
**Amendment Description:**

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

## AWARD INFORMATION

**Award Number (FAIN):** 2514823
**Award Instrument:** Continuing Grant
**Award Date:** 02/12/2025
**Award Period of Performance:** Start Date: 02/15/2025 End Date: 01/31/2029
**Project Title:** NSF-SNSF: Chemical Computing Architectures (CheCoA)
**Managing Division Abbreviation:** PHY
**Research and Development Award:** Yes
**Funding Opportunity:** NSF 23-615 Division of Physics: Investigator-Initiated Research Projects
**Assistance Listing Number(s) and Name(s):** 47.049 Mathematical and Physical Sciences (Predominant source of funding for SEFA reporting)

## FUNDING INFORMATION

**Amount Obligated by this Amendment:** $177,556
**Total Intended Award Amount:** $762,583
**Total Approved Cost Share or Matching Amount:** $0

**Total Amount Obligated to Date:** $177,556
**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

| Fiscal Year | Increment Amount |
|---|---|
| 2026 | $186,813 |
| 2027 | $195,482 |
| 2028 | $202,732 |

## PROJECT PERSONNEL

**Principal Investigator:** [redacted]

**Email:** [redacted]

**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

## NSF CONTACT INFORMATION

**Managing Grants Official** (Primary Contact)
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov
**Phone:** (703) 292-5329

**Awarding Official**
**Name:** Pamela V. Conyers
**Email:** pconyers@nsf.gov

**Managing Program Officer**
**Name:** Krastan B Blagoev
**Email:** kblagoev@nsf.gov
**Phone:** (703) 292-4666

## GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-615 Division of Physics: Investigator-Initiated Research Projects.

## BUDGET

| A. Senior Personnel | |
|---|---|
| Senior Personnel Count | 1.00 |
| Senior Personnel Calendar Months | 0.50 |
| Senior Personnel Academic Months | 0.00 |
| Senior Personnel Summer | 0.00 |

| | |
|---|---|
| Months | |
| Senior Personnel Amount | $15,877 |
| **B. Other Personnel** | |
| **Post Doctoral Scholars** | |
| Post Doctoral Count | 1.00 |
| Post Doctoral Calendar Months | 12.00 |
| Post Doctoral Academic Months | 0.00 |
| Post Doctoral Summer Months | 0.00 |
| Post Doctoral Amount | $67,600 |
| **Other Professionals** | |
| Other Professionals Count | 0.00 |
| Other Professionals Calendar Months | 0.00 |
| Other Professionals Academic Months | 0.00 |
| Other Professionals Summer Months | 0.00 |
| Other Professionals Amount | $0 |
| **Graduate Students** | |
| Graduate Students Count | 0.00 |
| Graduate Students Amount | $0 |
| **Undergraduate Students** | |
| Undergraduate Students Count | 0.00 |
| Undergraduate Students Amount | $0 |
| **Secretarial - Clerical** | |
| Secretarial - Clerical Count | 0.00 |
| Secretarial - Clerical Amount | $0 |
| **Other** | |
| Other Count | 0.00 |
| Other Amount | $0 |
| *Total Salaries and Wages (A+B)* | $83,477 |
| **C. Fringe Benefits** | $18,532 |
| *Total Salaries, Wages, Fringe Benefits (A + B + C)* | $102,009 |
| **D. Equipment** | $0 |
| **E. Travel** | |
| Domestic | $0 |
| International | $3,054 |
| **F. Participant Support Costs** | |
| Participant Support Costs Stipends | $0 |
| Participant Support Costs Travel | $0 |
| Participant Support Costs Subsistence | $0 |

| | |
|---|---|
| Participant Support Costs Other | $0 |
| Total Number of Participants | 0.00 |
| *Total Participant Costs (F)* | $0 |
| **G. Other Direct Costs** | |
| Materials Supplies | $0 |
| Publication Costs | $0 |
| Consultant Services | $0 |
| Computer Services | $0 |
| Subawards | $0 |
| Other | $0 |
| *Total Other Direct Costs (G)* | $0 |
| **H. Total Direct Costs (A Through G)** | **$105,063** |
| **I. Indirect Costs*** | **$72,493** |
| **J. Total Direct and Indirect Costs (H + I)** | $177,556 |
| **K. Fees** | $0 |
| **L. Total Amount of Request (J) OR (J + K)** | **$177,556** |
| **M. Cost Sharing Proposed Level** | $0 |

*Indirect Cost Rates

| Item Name | Indirect Cost Rate |
|---|---|
| 69% MTDC Federally Negotiated Rate | 69.0000% |

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

# Harvard termination review

**From:** "Lichtman, Jeremy - OSEC, DC" <jeremy.lichtman@usda.gov>
**To:** "Linden, Ralph - OGC, DC" <ralph.linden@usda.gov>, "Mizoguchi, Brian - OGC, DC" <brian.mizoguchi@usda.gov>
**Cc:** "Buller, Kailee - OSEC, DC" <kailee.buller@usda.gov>, "Tiller, Jennifer - OSEC, DC" <jennifer.tiller@usda.gov>, "Cole, Chelsea - OCFO-OCFO" <chelsea.cole@usda.gov>, "Whitney, Tyson - OCFO-OCFO" <tyson.whitney@usda.gov>, "Berry, Samuel - OSEC, DC" <samuel.berry@usda.gov>
**Date:** Thu, 08 May 2025 16:05:55 +0000
**Attachments:** [redacted]

Hi Ralph and Brian,

GSA has asked us to prepare the below for termination with such termination awaiting final greenlight from the White House. [redacted] GSA has requested this today, of course.

CC'ing the grants team, Kailee, and Jen for visibility as we are working real-time on this. Thank you for your help.

| FAIN | USASpending link | Funding Office Name |
|---|---|---|
| 23PA11132400357 | https://www.usaspending.gov/award/ASST_NON_23PA11132400357_12C2/ | USDA FOREST SERVICE |
| 22JV11242306078 | https://www.usaspending.gov/award/ASST_NON_22JV11242306078_12C2/ | NORTHERN RESEARCH STATION |
| 22JV11221638199 | https://www.usaspending.gov/award/ASST_NON_22JV11221638199_12C2/ | USDA FS ROCKY MT. RESEARCH |
| 23CS11242308068 | https://www.usaspending.gov/award/ASST_NON_23CS11242308068_12C2/ | NORTHERN RESEARCH STATION |

Regards,
Jeremy

Jeremy Lichtman
Senior Advisor – Government Efficiency
Office of the Secretary

United States Department of Agriculture
1400 Independence Ave, SW, Washington, DC 20250
c: (771) 241-5981

USDA United States Department of Agriculture
Forest Service
Washington Office
1400 Independence Ave, SW
Washington, D.C. 20250

**File Code:** 1580
**Date:** May 9, 2025

Dr. Alan Garber
Office of the President
Harvard University
Massachusetts Hall
Cambridge, MA 02138

Dr. Garber:

The Forest Service is hereby providing notice that funding for the projects in the attached spreadsheet will be terminated.

These awards no longer effectuate agency priorities. The Forest Service is responsible for ensuring that its limited resources are appropriately allocated. Our policy is that Federal assistance should support institutions that foster safe, equal, and healthy working and learning conditions conducive to high-quality research.

We are aware of recent events at Harvard University involving antisemitic action that suggest the institution has a disturbing lack of concern for the safety and wellbeing of Jewish students. Harvard's ongoing inaction in the face of repeated and severe harassment and targeting of Jewish students has ground day-to-day campus operations to a halt, deprived Jewish students of learning and research opportunities to which they are entitled, and brought shame upon the University and our nation as a whole. Indeed, as the Harvard Presidential Task Force on Combating Antisemitism and Anti-Israeli Bias concluded, actions at Harvard during the 2023-2024 academic year resulted in widespread abuse of Jewish and Israeli students by an institution "that mainstreamed and normalized what many Jewish and Israeli students experience as antisemitism and anti-Israeli bias."

Supporting research in such an environment is plainly inconsistent with Forest Service priorities and *raison d'etre* of funding and championing the very best American research and educational institutions.

Upon being made aware of systematic institutional failures to address deeply rooted antisemitism and racial discrimination, the University has refused to take appropriate action. We perceive these categorical rejections to manifest the University's unwillingness to take corrective action or implement necessary reforms. Therefore, no modification of the projects could align the projects with agency priorities.

**Administrative Appeal.**

You may object and provide information and documentation challenging these

terminations.

You must submit a request for such review to my attention at the address above no later than 30 days after this letter is received, except that if you show good cause why an extension of time should be granted, you may be granted an extension of time. The request for review must include a copy of this decision, must identify the issue(s) in dispute, and must contain a full statement of your position with respect to such issue(s) and the pertinent facts and reasons in support of your position. In addition to the required written statement, you shall provide copies of any documents supporting your claim.

Sincerely,

Andria Weeks
Associate Deputy Chief, Business Operations

# Re: Harvard Unspent Funds

**From:** Brandon Bartel - B-C <brandon.bartel@gsa.gov>
**To:** Josh Gruenbaum - Q <josh.gruenbaum@gsa.gov>
**Cc:** "Cooper, Renee (HHS/ASFR)" <renee.cooper@hhs.gov>, "Kuruvilla, Jacob (HHS/ASFR)" <jacob.kuruvilla@hhs.gov>, "Stone, Brian" <bstone@nsf.gov>, "Marrongelle, Karen A." <kmarrong@nsf.gov>, "Hickey, James P (Jim) JR SES (USA)" <james.p.hickey26.civ@mail.mil>, "Simonpour, Alexander (HQ-AA000)[GSA]" <alexander.simonpour@nasa.gov>, "Blake, Adam" <adam.blake@hq.doe.gov>, "Coe, Carl" <carl.coe@hq.doe.gov>, "Ramada, Adam" <adam.ramada@ed.gov>, Marshall Wood - A <marshall.wood@gsa.gov>, "Trampe, Katrine M" <katrine_trampe@ios.doi.gov>, "Hassen, Tyler L" <tyler_hassen@ios.doi.gov>, "Luby, Matthew P" <matthew_luby@ios.doi.gov>, "Lichtman, Jeremy - OSEC, DC" <jeremy.lichtman@usda.gov>, "Langmack, Scott" <scott.langmack@hud.gov>, Matthew Johnson <matjohnson@usaid.gov>, "Allen, Lara (OJP)" <lara.allen@usdoj.gov>, "Short, Victoria" <victoria.short@hq.dhs.gov>, "James, Sharon D" <jamessd@state.gov>, Ethan Shaotran - AD <ethan.shaotran@gsa.gov>, Ethan Shaotran - NOAA Federal <ethan.shaotran@noaa.gov>, "Terrell, Zachary (OS/IOS)" <zachary.terrell@hhs.gov>, "Weiss, Yinon CIV (USA)" <yinon.weiss.civ@mail.mil>, Alexander Simonpour - A <alexander.simonpour@gsa.gov>, "Morgan, Brooks" <brooks.morgan@ed.gov>, "Cole, Michael - OSEC, DC" <michael.cole2@usda.gov>, "Berry, Samuel - OSEC, DC" <samuel.berry@usda.gov>, "Makecha, Tarak (JMD)" <tarak.makecha@usdoj.gov>, "SCHUTT, KYLE" <kyle.schutt@hq.dhs.gov>, "HOFFMAN, ADAM" <adam.hoffman@hq.dhs.gov>, "Samuel.Corcos@treasury.gov" <samuel.corcos@treasury.gov>, "Lewin, Jeremy" <lewinj@state.gov>
**Date:** Thu, 08 May 2025 15:32:57 +0000
**Attachments:** Harvard Grants - Line Item.xlsx (965.34 kB)

Please see the line items attached.

On Thu, May 8, 2025 at 11:30 AM Josh Gruenbaum - Q <josh.gruenbaum@gsa.gov> wrote:

> Sorry one more...please use the template termination letter attache and tweak for your programs
>
> This is the form the WH wants to see it in

**U.S. General Services Administration**

**Josh Gruenbaum**
Commissioner of Federal Acquisition Service
[redacted]
*josh.gruenbaum@gsa.gov*

> On Thu, May 8, 2025 at 11:29 AM Josh Gruenbaum - Q <josh.gruenbaum@gsa.gov> wrote:
>
> > Brandon please send this group the backup line items so they have for each grant ASAP

**U.S. General Services Administration**

**Josh Gruenbaum**
Commissioner of Federal Acquisition Service
[redacted]
*josh.gruenbaum@gsa.gov*

> > On Thu, May 8, 2025 at 11:08 AM Brandon Bartel - B-C <brandon.bartel@gsa.gov> wrote:
> >
> > > Hi All -
> > >
> > > Josh asked me to pass along this table.
> > >
> > > Thanks,

**Document Produced in Native Format**

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

| | |
|---|---|
| PRESIDENT AND FELLOWS OF HARVARD COLLEGE, *et al.*,<br><br>Plaintiffs,<br>v.<br><br>UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES, *et al.*,<br><br>Defendants. | Case No. 1:25-cv-11048-ADB |

**DECLARATION OF JOSH GRUENBAUM**

I, Josh Gruenbaum, pursuant to 28 U.S.C. § 1746, declare under penalty of perjury as follows:

1. I am the Commissioner of the Federal Acquisition Service ('FAS') at the General Services Administration ("GSA") headquartered in Washington, D.C. I make this declaration based on my own personal knowledge, information contained in the records of GSA, and information provided to me by GSA employees or other federal government employees. I have served in my current position since January 2025.

2. I am providing this declaration as part of the Administrative Record in this case, which I understand to be challenging as final agency action certain federal agencies' "freeze and termination of federal financial assistance" to Harvard. Am. Compl. ⁋⁋ 109, 142. As further detailed below, while GSA employees have had some involvement in facilitating other agencies' reviews of Harvard's grants, GSA has not frozen or terminated any grants with Harvard.

3. On January 29, 2025, President Trump issued Executive Order 14188, "Additional Measures to Combat Anti-Semitism," instructing federal government agencies to combat anti-

Semitism vigorously, using all available appropriate legal tools, particularly with regard to harassment at schools and on university and college campuses.

4. On or about February 3, 2025, I was named as a member of a Federal Task Force to Combat Anti-Semitism ("Task Force"), coordinated through the Department of Justice's ("DOJ") Civil Rights Division, and including members of other federal agencies such as the U.S. Department of Education ("ED") and the U.S. Department of Health and Human Services ("HHS").

5. On March 31, 2025, ED, HHS, and GSA announced a comprehensive review of federal contracts and grants at Harvard University and its affiliates. Per the press release, the review included more than $255.6 million in contracts and $8.7 billion in grants between Harvard, its affiliates, and the Federal Government. (GSA Admin. Rec. A)

6. On March 31, 2025, I issued a Memorandum to Harvard President Dr. Alan M. Garber and Penny Pritzker, Lead Member, Harvard Corporation, entitled "Review of Federal Government Contracts." This Memorandum included a list of 63 contracts between the federal government and Harvard, totaling $255.6 million of contract ceiling value, for which "the Federal Government [was] ready to work with each appropriate contracting agency on the potential issuance of Stop Work Orders." The Memorandum asserted the Federal Government's right to terminate for convenience any of these contracts at any time during the period of performance. None of the grants or contracts lists were between GSA and Harvard. (GSA Admin. Rec. B)

7. On April 3, 2025, GSA, HHS, and ED issued a letter to Harvard President Dr. Alan M. Garber and Penny Pritzker, Lead Member, Harvard Corporation, following up on the March 31, 2025 letter. The letter listed "several broad, non-exhaustive areas of reform that the government views as necessary for Harvard to implement to remain a responsible recipient of federal taxpayer

dollars." The letter also stated that Harvard "has fundamentally failed to protect American students and faculty from antisemitic violence and harassment in addition to other alleged violations of Title VI and Title VII of the Civil Rights Act of 1964." (GSA Admin. Rec. C)

8. On April 11, 2025, GSA, HHS, and ED issued a letter to Harvard President Dr. Alan M. Garber and Penny Pritzker, Lead Member, Harvard Corporation, incorporating and superseding the terms of the April 3, 2025 letter. (GSA Admin. Rec. D)

9. On April 14, 2025, the Task Force announced a freeze on $2.2 billion in multi-year grants and $60 million in multi-year contract value to Harvard. (GSA Admin. Rec. E). None of the grants or contracts were GSA grants or contracts.

10. In late April and early May 2025, GSA helped coordinate agencies' efforts to identify grants with Harvard. This included compiling data points on various federal grants, tracking gross award value of the grants, and providing template termination letters. (GSA Admin. Rec. F)

11. On May 13, 2025, the Task Force announced the termination of an additional approximately $450 million in grants to Harvard from eight federal agencies. (GSA Admin. Rec. G). GSA was not one of the eight federal agencies announcing the termination of grants to Harvard.

12. A search of USASpending.gov, the official open source of federal spending information, including information about federal awards such as contracts, grants, and loans, none

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of the Federal Government's active contracts with Harvard were awarded by GSA. (GSA Admin. Rec. H)

I declare under penalty of perjury that the foregoing is true and correct.

Dated: Washington, DC
May 19, 2025

Signed by:
gruenbaum, josh
2E0F9ABC0FC249F...

JOSH GRUENBAUM

**UNITED STATES DISTRICT COURT**
**FOR THE DISTRICT OF MASSACHUSETTS**

| | | |
|---|---|---|
| PRESIDENT AND FELLOWS OF HARVARD COLLEGE, | ) | |
| Plaintiff, | ) | Case No. 1:25-cv-11048-ADB |
| v. | ) | |
| UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES, *et al.*, | ) | |
| Defendants. | ) | |

**DECLARATION OF MAUREEN A. HENNEBERG**

I, MAUREEN A. HENNEBERG, pursuant to 28 U.S.C. § 1746, declare as follows:

1. I am the Deputy Assistant Attorney General for Operations and Management for the Office of Justice Programs within the United States Department of Justice at Washington, D.C. I have served the Office of Justice Programs (OJP) in this role since February 2015. In this position, I advise the agency on management and operational issues and oversee the work of all OJP business offices, including the Office of the Chief Financial Officer; the Office of Administration; the Office of Audit, Assessment, and Management; the Office of the Chief Information Officer; the Office of Communications; and the Office of Equal Employment Opportunity. Included among the responsibilities carried out by and through these offices overseen is the management of OJP's modern, automated system for managing its grants-related information. I make this declaration based on my personal knowledge and on information that is available to me in my official capacity.

2. JustGrants is the grants management system developed by the U.S. Department of Justice that OJP uses to manage and maintain records pertaining to all OJP grant awards throughout the grants lifecycle. A search of JustGrants grant award records for awards to "Harvard" identified only two awards with periods of performance extending into calendar year 2025. The award numbers and performance period end dates for the two awards are as follows:

- 2019-RY-BX-0001 (President and Fellows of Harvard College)

  Performance period end date: August 31, 2025

- 15PNIJ-23-GK-01928-HT (Harvard College President & Fellows of)

  Performance period end date: December 31, 2025

3. OJP has not suspended (or paused or frozen) the aforementioned awards to Harvard. Moreover, OJP has not initiated any termination activity regarding these awards.

4. A JustGrants system screenshot, indicating the "active" status of each of the aforementioned awards, is attached to this declaration as Exhibit 1.

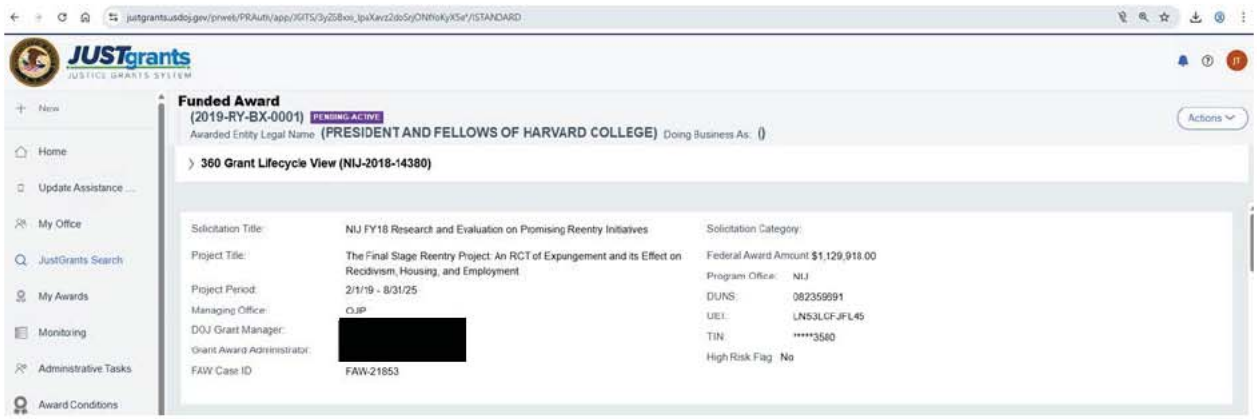
I declare under penalty of perjury that the foregoing is true and correct.

EXECUTED this 16th day of May, 2025.

[redacted]

Maureen A. Henneberg
Deputy Assistant Attorney General for
Operations and Management
Office of Justice Programs

**Exhibit 1 to Henneberg Declaration**
**OJP JustGrants system screenshots of Awards to Harvard**


JUSTgrants
JUSTICE GRANTS SYSTEM
New
Home
Update Assistance ...
My Office
JustGrants Search
My Awards
Monitoring
Administrative Tasks
Award Conditions
Funded Award
(2019-RY-BX-0001) PENDING-ACTIVE
Awarded Entity Legal Name (PRESIDENT AND FELLOWS OF HARVARD COLLEGE) Doing Business As: ()
Actions
360 Grant Lifecycle View (NIJ-2018-14380)
Solicitation Title: NIJ FY18 Research and Evaluation on Promising Reentry Initiatives
Project Title: The Final Stage Reentry Project: An RCT of Expungement and its Effect on Recidivism, Housing, and Employment
Project Period: 2/1/19 - 8/31/25
Managing Office: OJP
DOJ Grant Manager:
Grant Award Administrator:
FAW Case ID: FAW-21853
Solicitation Category:
Federal Award Amount: $1,129,918.00
Program Office: NIJ
DUNS: 082359991
UEI: LN53LCFJFL45
TIN: *****3580
High Risk Flag: No


JUSTgrants
JUSTICE GRANTS SYSTEM
New
Home
Update Assistance ...
My Office
JustGrants Search
My Awards
Monitoring
Administrative Tasks
Award Conditions
Active Funded Award
(15PNIJ-23-GK-01928-HT) PENDING-ACTIVE
Awarded Entity Legal Name (HARVARD COLLEGE PRESIDENT & FELLOWS OF) Doing Business As: ( )
Current Entity Legal Name (PRESIDENT AND FELLOWS OF HARVARD COLLEGE) Doing Business As: ( )
Actions
360 Grant Lifecycle View (O-NIJ-2023-171574)
Solicitation Title: NIJ FY23 Research and Evaluation on Trafficking in Persons
Project Title: Evaluating Processes and Outcomes of Housing Models for Victims of Human Trafficking
Project Period: 1/1/24 - 12/31/25
Managing Office: OJP
DOJ Grant Manager:
Grant Award Administrator:
FAW Case ID: FAW-176588
Solicitation Category: N/A
Federal Award Amount: $654,195.00
Program Office: NIJ
DUNS: 149617367
UEI: UNVDZNFA8R29
TIN: *****3580
High Risk Flag: No

**UNITED STATES DISTRICT COURT**
**FOR THE DISTRICT OF MASSACHUSETTS**

| | |
|---|---|
| PRESIDENT AND FELLOWS OF HARVARD COLLEGE,<br><br>Plaintiff,<br><br>v.<br><br>UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES, *et al.*<br><br>Defendants. | Case No. 1:25-cv-11048-ADB |

**DECLARATION OF ERIN M. LORAH**

I, Erin M. Lorah, declare as follows:

1. I am the Associate Director for the Grants Financial Management Unit in the United States Department of Justice's Office on Violence Against Women (OVW). In this capacity, I provide oversight and guidance for OVW's Grants Financial Management Unit, which is responsible for the financial management of the more than two dozen federal grant programs administered by OVW. Prior to becoming Associate Director in June 2022, I served in this position on an acting basis beginning in January 2020. For the previous six years, I served as a Senior Financial Analyst/Team Lead on the Grants Financial Management Unit. I began working with OVW as a contractor with this Unit in February 2010. I make this declaration based on information personally known to me and conveyed to me in my official capacity.

2. In my role as Associate Director, I am a frequent user of the Department of Justice's Justice Grants System ("JustGrants"), which contains data on OVW awards. To the extent that OVW has an open grant award with an entity, or one that was closed or terminated since October 2020, it would be reflected in JustGrants.
3. Using JustGrants's Data Management, Reporting, and Analytics (DMRA) tool, I conducted a search for grants from OVW to any entity associated with "Harvard" and found none. This means that OVW does not have an open award to Harvard or one that was terminated in the past five years. A screenshot of this search result is attached to this declaration as Exhibit 1.

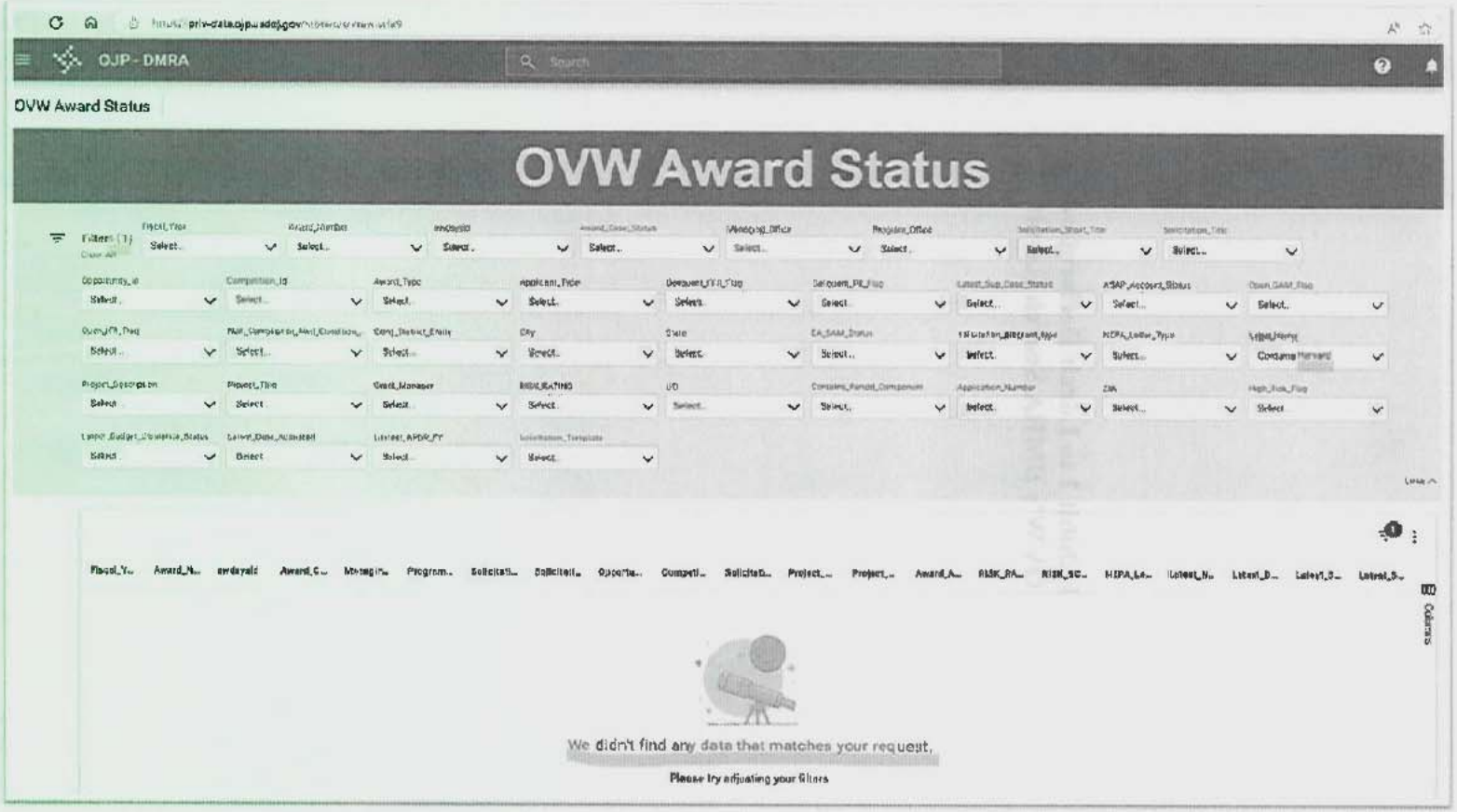
In accordance with 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed this 6th day of May, 2025, at Washington, DC.

[redacted]

Erin M. Lorah

**Exhibit 1 to Lorah Declaration**
**OVW's DMRA Search Result**


OJP - DMRA
OVW Award Status
OVW Award Status
We didn't find any data that matches your request.
Please try adjusting your filters

**UNITED STATES DISTRICT COURT**
**FOR THE DISTRICT OF MASSACHUSETTS**

| | | |
|---|---|---|
| PRESIDENT AND FELLOWS OF HARVARD COLLEGE,<br><br>Plaintiff,<br><br>v.<br><br>UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES, *et al.*<br><br>Defendants. | ) | Case No. 1:25-cv-11048-ADB |

**DECLARATION OF TARA JAMISON**

I, Tara Jamison, hereby declare:

1. I am the Director of the Office of Acquisition Management and Deputy Senior Procurement Executive at the Department of Justice. My responsibilities include managing and monitoring the Department's acquisition system.

2. For purposes of procurement matters, the Department is divided into nine bureaus. Each bureau has a Bureau Procurement Chief (BPC).

3. On April 24, 2025, I requested that each BPC report to me as to whether their bureau has any current contracts with Harvard University. Each BPC provided a negative response. Based on those reports, I conclude that the Department has no current contracts with Harvard University.

In accordance with 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct. Executed on May 19, 2025.

TARA JAMISON Digitally signed by TARA JAMISON Date: 2025.05.19 12:49:01 -04'00'

Tara Jamison