Some NSF Funding Opportunities for Statisticians

Cheryl L Eavey

2024 Joint Statistical Meetings

August 4, 2024

NSF Supports Multiple STEM Fields

Biological Sciences

Computer & Information Science & Engineering

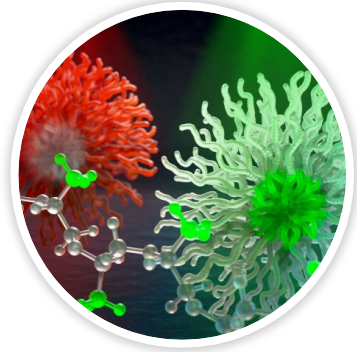
STEM Education

Engineering

Geosciences (including Polar Programs)

Integrative Activities

International Science and Engineering



Mathematical & Physical Sciences

Social, Behavioral & Economic Sciences

Technology, Innovation & Partnerships

The Methodology, Measurement, and Statistics (MMS) Program (NSF 19-575)

- MMS supports the development of innovative analytical and statistical methods and models for the social, behavioral, and economic sciences.
- MMS seeks proposals that are methodologically innovative, grounded in theory, and have potential utility for multiple fields within the social and behavioral sciences.

The MMS Program . . .

is an interdisciplinary program that supports a wide range of scientists, including geographers, statisticians, psychologists, economists, political scientists, sociologists, and others, all working on the development of methods for the social, behavioral, and economic sciences.

Funding Mechanisms:

- Regular Research Proposals
- Early Career Development (CAREER) proposals
- Proposals for conferences, workshop, and community-development activities
- Doctoral Dissertation Research Improvement (DDRI) proposals

Faculty Early Career Development (CAREER) Program (NSF 22-586)

- CAREER is an NSF-wide funding opportunity
- CAREER is NSF's most prestigious award in support of early-career faculty
- CAREER provides substantial support for "early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research."

CAREER Characteristics

- Minimum of $400,000 for a 5-year duration for most programs; Minimum of $500,000 for a 5-year duration for programs in BIO, ENG, and OPP.
- NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious recent CAREER awardees.
- Integration of Research and Education
- Deadline: Fourth Wednesday in July
- Additional details; including recent webinar, on NSF CAREER site.

CAREER: Flexible Record Linkage through Realistic Modeling of Dependent, Missing, and Updating Data

- SES-2338428, PI Andee Kaplan (Colorado State University).
- The goal of this research is to develop flexible Bayesian record linkage models to enable more accurate linking of data sets without unique identifiers. The methods will be applied to publicly available and Census Bureau data from the 19th century with identifying information about freedom seekers, captive individuals in the coastwise slave trade, and Black Americans in the Antebellum South.
- Educational activities include an international workshop on record linkage and historical data, a community field day, and a PhD. course on statistical tools for historical demographic data.

Doctoral Dissertation Research Improvement Proposals

- Supported by MMS in an effort to improve the quality of doctoral dissertation research.
- Funds are to be used for expenses associated with the conduct of the research that normally are not underwritten by the home institution.
- The advisor serves as principal investigator; the student serves as co-principal investigator.
- It is expected that the intellectual input to the proposed research be predominantly that of the student.
- The maximum for a DDRI award from MMS is $18,000 (includes both direct and indirect costs).

Doctoral Dissertation Research: Addressing Survey Nonresponse and Attrition in Probability-based Online Panels and Online Longitudinal Data Collections

- SES-2344816, PI Brady West and Co-PI Htay-Wah Saw (University of Michigan – Ann Arbor)

- This research will address issues of survey nonresponse and attrition in probability-based online panels and online longitudinal data collections.

Spatial Homogeneity Learning Models with Applications to Socioeconomic Problems

- SES- 2412922, PI Guanyu Hu (University of Texas Health Science Center at Houston) and Co-PIs Sergio Rey (SDSU) and Shujie Ma (UCR).
- Award supported by MMS and HEGS.
- This research project will develop statistical methodologies and associated theories that facilitate the analysis of spatial data for socioeconomic problems. The project is motivated by common features found in many modern datasets, such as the U.S. Census Bureau's American Community Survey.

Centers for Research and Innovation in Science, Environment, and Society (CRISES)

Seeks to…

- Build research capacity and infrastructure to address complex and compounding national and global crises whose solutions require a human-centered approach.
- Support interdisciplinary research to develop evidence-based solutions that address fundamental quality-of-life issues, such as those involving the environment, extreme weather and sustainability; workforce and the economy; equity and access to opportunities; and well-being.

FY24 Dear Colleague Letter

- We invited PIs to submit **planning** proposals (budgets up to $100,000 for a 1 or 2-year project) as the first steps toward developing large-scale interdisciplinary research centers that will address today's crises and ultimately enhance people's quality of life.
- Planned activities that bring together experts from a range of disciplines to explore the creation of a center to study and develop solutions to one or more pressing societal issues.

Concept notes received: 153
Approved for full submission: 109

Planning proposals received: 105
Conference proposals received: 24

FY23 awards made: 15
FY23 awards totaled $1,443,740.00

CRISES 2023 Portfolio

Topics represented:

1. Environment (including climate/ disaster response & resilience)
2. Social Justice/ Inequities / Well-being

Why Planning Proposals?

- Support initial conceptualization, planning and collaboration activities to formulate new plans for large-scale projects in emerging research areas for future submission to an NSF program.
- Planning activities can provide teams with the opportunity to envision structures that would ultimately compose a center.
- Forming partnerships with stakeholders, engagement with communities, refine the scope and vision for a center, creating a vision for the potential broader impacts of a center, including diversity, workforce development, and education.
- Building the framework for a center requires time and investment to strengthen relationships and refine a common vision. Planning proposals are intended to support teams in that process.

Research Infrastructure in the Social and Behavioral Sciences (RISBS)

- Supporting large-scale research infrastructure (RI) projects including:
  - ➢Major Data Collection Efforts
  - ➢Databases
  - ➢Methodological Platforms

RISBS General Information

- Principal Goals of the Program:
  - ➢To promote *large-scale* RI as tools to enable basic research in the SBE sciences.
  - ➢To develop connections that further the creation and sustained existence of large-scale SBE RI.
- Projects should be aimed at creating computational tools and data to enable research by social scientists.
- Full proposals accepted anytime.
- Research Infrastructure in the Social and Behavioral Sciences (RISBS) | NSF - National Science Foundation

Cyberinfrastructure for Sustained Scientific Innovation (CSSI)

https://www.nsf.gov/pubs/2022/nsf22632/nsf22632.htm

- Supports the **development and deployment** of robust, reliable and sustainable **data and software cyberinfrastructure**
- Brings **innovative** capabilities towards sustained scientific innovation and discovery in **one or more areas of science and engineering**.
- Provides a **cross-directorate** opportunity to advance common approaches to sustain and innovate research cyberinfrastructures

Project Class	Description
Elements	Small groups that will create and deploy robust capabilities for which there is a demonstrated need. (Awards <= $600K, up to 3 years)
Framework Implementations	Larger, interdisciplinary teams developing common infrastructure aimed at solving common research problems, resulting in a sustainable community framework. (Awards between $600K - $5 Million, between 3-5 years)
Transition to Sustainability	Groups executing a well-defined sustainability plan for existing CI with demonstrated impact with focus on enabling new avenues of support for the long-term sustained impact. (Awards <= $1 Million, up to 2 years)

Upcoming Dates	
August 12 – 13, 2024	PI Meeting, Charlotte NC
October xx, 2024	Program Webinar for FY25
Dec 02, 2024	Program Deadline for FY25

How to Find the Right Funding Opportunity

https://new.nsf.gov/funding/getting-started

Use the NSF Funding Search

NSF posts its active funding opportunities on the NSF Funding Search page. You can search opportunities by keyword or filter results by a specific NSF **directorate or division** you're interested in and other criteria.

Search for funding

Subscribe to email alerts

Subscribe to NSF's email updates to receive information on NSF funding opportunities and updates in the topic areas you choose.

Subscribe to updates

Explore funded projects

Search NSF's database of previously funded projects to find projects in similar areas to yours and see which NSF programs funded them.

Award search

Visit NSF's directorate pages

NSF is organized into directorates reflecting the major areas of science and engineering funded by the foundation. On their pages you can find additional information about programs they fund.

NSF directorates

Explore NSF's initiatives

NSF's initiatives fund activities across a range of disciplines, focusing on challenges like advancing diversity in STEM and accelerating the translation of knowledge into tangible benefits to society.

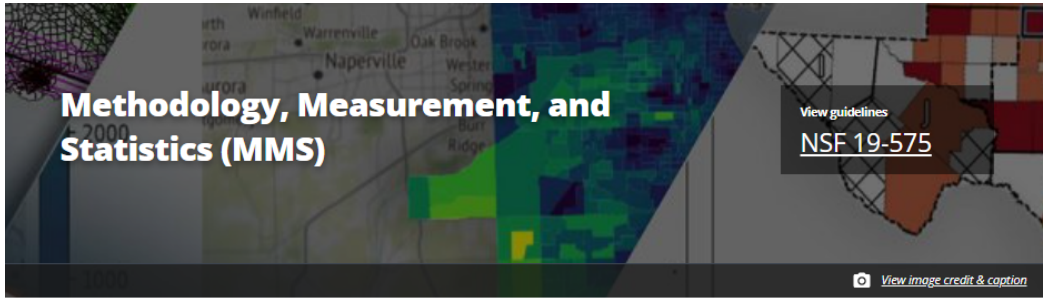
Explore NSF initiatives

Can't find an NSF program that fits your project idea?

Learn how to submit an unsolicited proposal to NSF when there is no natural "home" for it in one of NSF's existing programs.

Unsolicited proposals

Proposal Preparation Instructions



Home / Funding at NSF / Funding Search / Methodology, Measurement, and Statistics (MMS)

Print

Important information for proposers
All proposals must be submitted in accordance with the requirements specified in this funding opportunity and in the NSF Proposal & Award Policies & Procedures Guide (PAPPG) that is in effect...

Supports the development of analytical and statistical methods and models with potential utility in multiple fields of the social, behavioral and economic sciences.

Synopsis

The Methodology, Measurement, and Statistics (MMS) Program is an interdisciplinary program in the Directorate for Social, Behavioral, and Economic Sciences that supports the development of innovative analytical and statistical methods and models for those sciences. MMS seeks proposals that are methodologically innovative, grounded in theory, and have potential utility for multiple fields within the social, behavioral, and economic sciences. As part of its larger portfolio, the MMS Program partners with a consortium of federal statistical agencies to support research proposals that further the production and use of official statistics.

The MMS Program provides support through a number of different funding mechanisms. The following mechanisms are addressed in this solicitation:

- Regular Research Awards
- Awards for conferences and community-development activities
- Doctoral Dissertation Research Improvement (DDRI) Grants
- Research Experience for Undergraduates (REU) Supplements

MMS also supports Faculty Early Career Development (CAREER) awards. Please see the CAREER Program Web Site for more information about this activity.

Collapse –

Upcoming due dates

Full proposal

2024

August 29 2024 - Deadline date
Last Thursday in August, Annually Thereafter

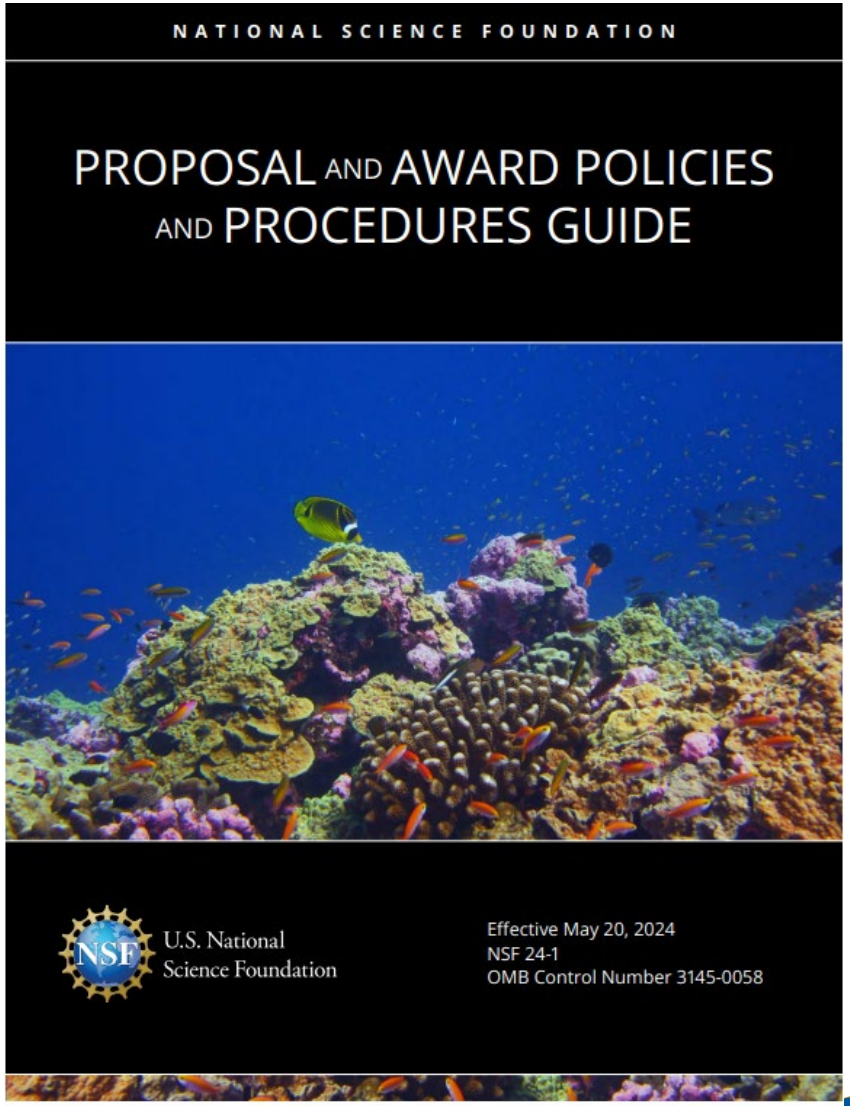
2025

January 30 2025 - Deadline date
Last Thursday in January, Annually Thereafter

Due by 5pm submitting organization's local time

Program guidelines

Award information
Approximately $3.76 million will be awarded annually, contingent upon the availability of funds. Additional funds may be available from participating federal statistical agencies for competitive research proposals of interest to those agencies. Project budgets should be developed at scales appropriate for the



MMS General Information

- **MMS Program Officer**
  - Cheryl L. Eavey
  - 703-292-7269; ceavey@nsf.gov
  - Methodology, Measurement, and Statistics (MMS) | NSF - National Science Foundation

- **Upcoming MMS Proposal Deadlines**
  - August 29, 2024
  - January 30, 2025