



**Welcome! We will begin the session shortly.
Please submit questions in the Zoom Q&A box.**

NSF MPS Mathematical Sciences Informational Webinar

October 7, 2026

Agenda

- Introduction
- NSF 26-520 MPS Mathematical Sciences Research Programs (MPS-MathSci)
- Additional funding opportunities
- Other items of interest
- Q&A

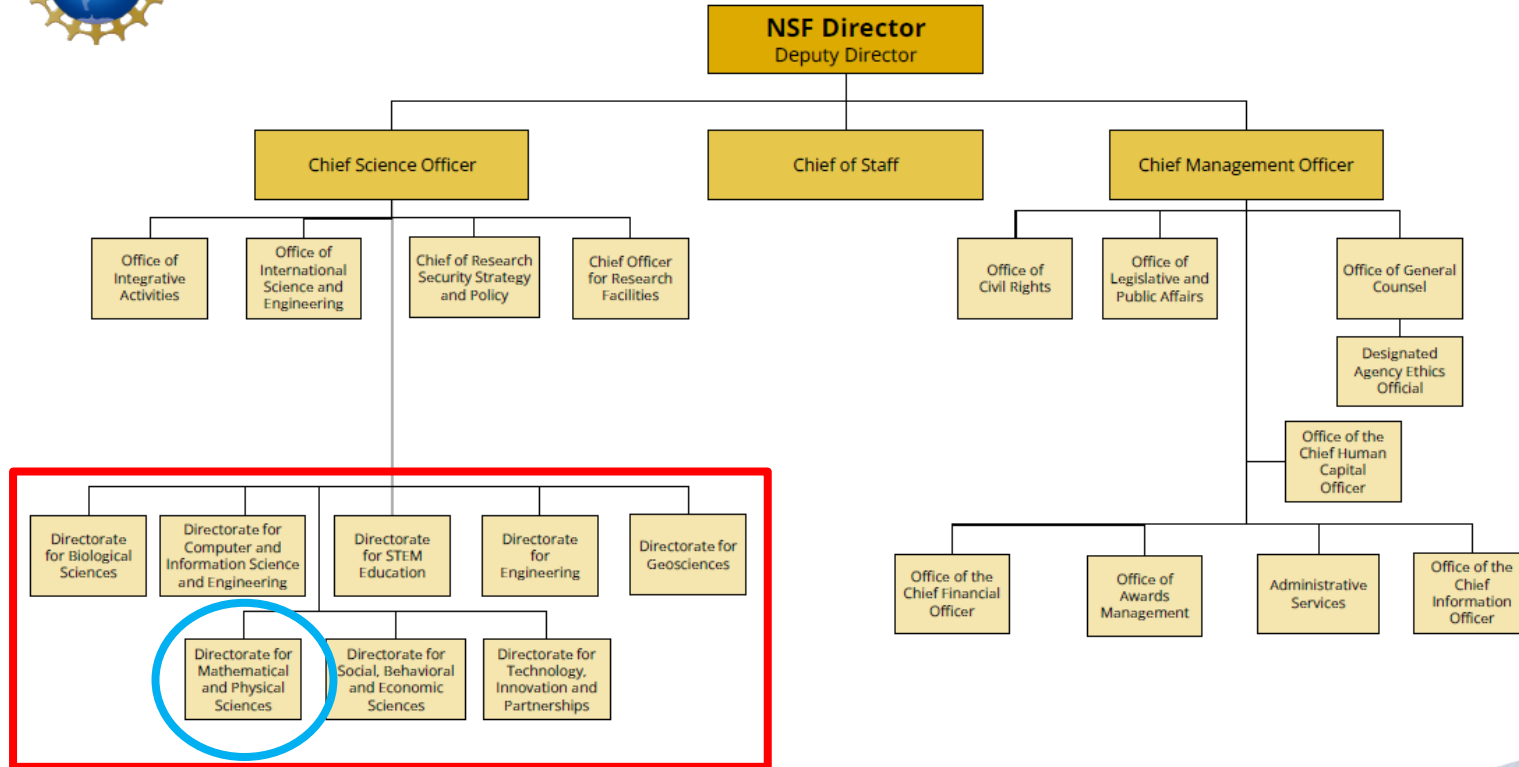




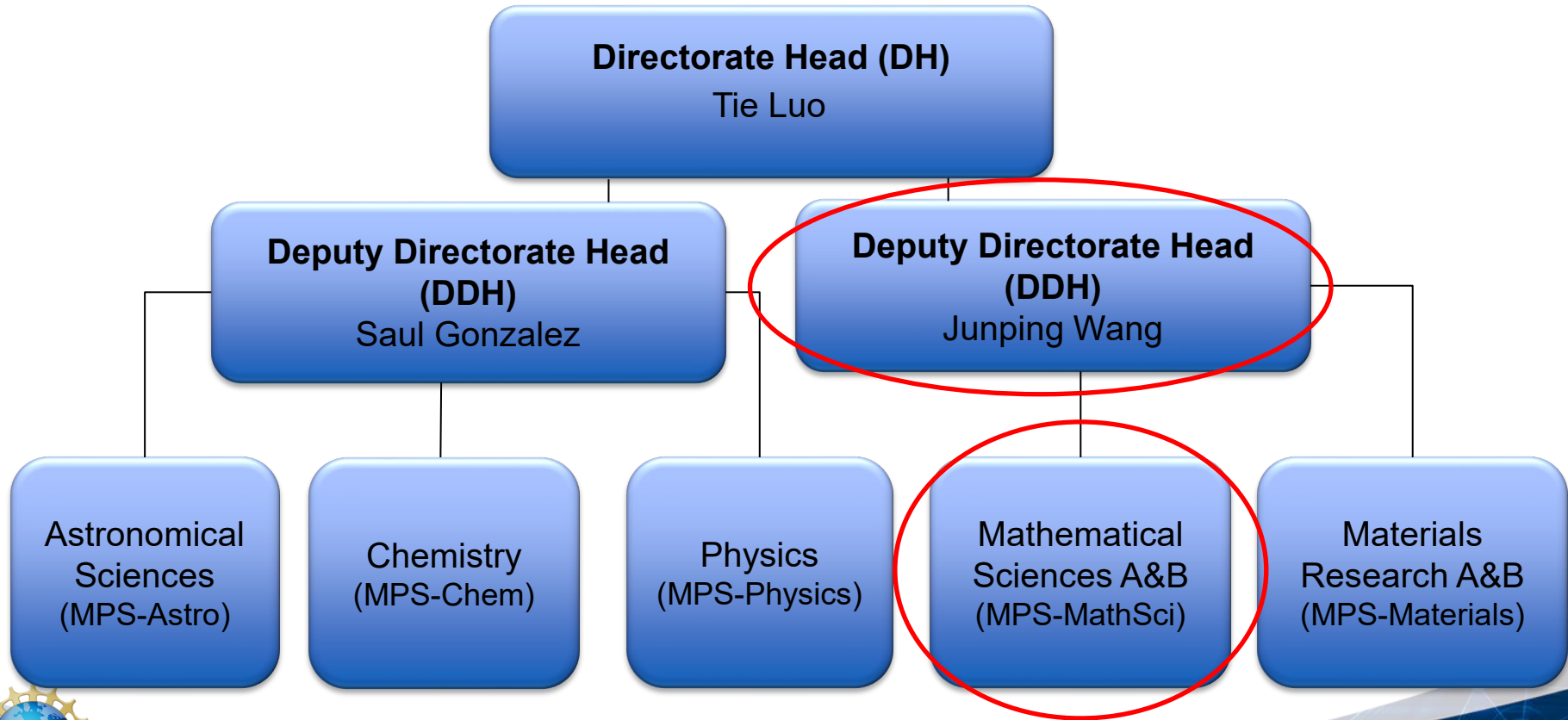
U.S. National Science Foundation

12/14/2025 organizational structure

Welcome from MPS Leadership



Welcome from MPS Leadership



MPS Mathematical Sciences Section Heads



Joanna Kania-Bartoszyńska



Stefaan DeWinter



MPS Mathematical Sciences Staff



Tomek Bartoszynski



Marian Bocea



Vu Dinh



Matt Douglass



Maria Emelianenko



Yekaterina Epshteyn



Zhilan Feng



Yuliya Gorb



Pawel Hitczenko



John Kolassa



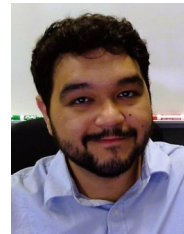
Stacey Levine



Qun Li



Wing Suet Li



Alfredo Vargas



Emily Witt



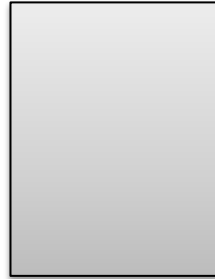
Yong Zeng



MAST Administrative Professionals



Craig McClure,
Business Operations Manager



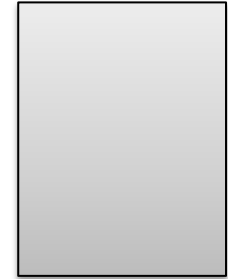
Nochienna Agubuzo



Onica Andrews



Jennifer Connell



Antoinette Dedmon



Tiana Faulcon



Valerie Maizel



KaJuana Mayberry



Cierra Wallace



NSF 26-520 At a Glance

- Programs now consolidated under one unified and simplified funding opportunity
- 14 programs covered
 - 11 core disciplinary programs
 - RTG, FRG, and Infrastructure
- New rolling submissions model -- proposals accepted anytime during the fiscal year
- NSF anticipates a portfolio of awards for these programs with a range of budgets, durations and scopes. Program budgets, number of awards, award sizes and durations are subject to the availability of funds.



Core Disciplinary Programs

Algebra & Number
Theory
ant@nsf.gov

Statistics
stat@nsf.gov

Mathematical
Biology
mathbio@nsf.gov

Analysis
analysis@nsf.gov

Computational
Mathematics
compmath@nsf.gov

Applied
Mathematics
appmath@nsf.gov

Topology &
Geometric Analysis
tga@nsf.gov

Probability,
Combinatorics &
Foundations
pcf@nsf.gov



Conferences and Workshops

- Proposals for conferences and workshops held in U.S.-based institutions may be submitted via the programs above. The topical area of the proposed conference or workshop must be within the scope of the programs to which it is submitted.
- For proposals seeking no more than \$50,000, submit at least six months in advance of the conference or workshop date. For proposals seeking more than \$50,000, submit at least nine months in advance of the conference or workshop date.
- In research.gov
 - submit to NSF 26-520
 - choose disciplinary program (or programs)
 - choose the **Conference** proposal type



MS-RTG: Research Training Groups

Research-centered training for workforce development

For research groups providing structured graduate training and lasting institutional capacity.

Program Goals

- Strengthen the mathematical and statistical sciences workforce in the U.S.
- Improve graduate research training and professional development through collaborative research.
- Prepare trainees for careers in academia, government, industry, and related sectors.
- Graduate trainees are central; undergraduate and postdoctoral trainees may also participate.

Key Features of an RTG project

- A coherent research theme and faculty team with strong research/mentoring records.
- Recruitment, selection, mentoring, retention, and professional-skills development plans for trainees.
- Institutional commitment to a supportive environment for research and education.
- Post-RTG sustainability plan to continue the pursuit of RTG goals when funding discontinues.
- Overall administrative and organizational structure that ensures effective management of the project resources.



MS-FRG: Focused Research Groups

Collaborative research for major, well-delineated challenges

Each proposal should:

- Provide a focused plan for making significant progress on a research challenge of recognized importance to the mathematical and statistical sciences.
- Describe how substantial progress on the problems would have wide consequences for the mathematical and statistical sciences.
- Describe the novel, innovative, and creative aspects of the planned research.
- Explain why the success of the proposed research project depends in a crucial way upon a group effort by the collaborators.

“... should I submit an FRG proposal?”

Below is a list of indicators suggesting that a focused research group proposal might be appropriate. This list is not exhaustive.

- Accumulated scientific results point to the possibility of a major, innovative breakthrough.
- A major recent breakthrough has created new possibilities for significant progress.
- New, interdisciplinary collaboration has revealed means to achieve accelerated progress through such cooperation, with corresponding advances and impacts in the mathematical and statistical sciences.



Other funding opportunities in the mathematical sciences, new initiatives, and Dear Colleague Letters

- Math Sci REU Sites
- NSF GRFP
- Math Sci Postdocs
- NSF CAREER
- Cross-disciplinary & cross-agency programs
- Genesis Mission DCL



Mathematical Sciences Research Experiences for Undergraduates Sites (DMS REU Sites)

Undergraduate Research Opportunities

REU Sites: An REU Site should provide research opportunities with a coherent intellectual theme and may be based in a single discipline or academic department or be interdisciplinary and multi-departmental.

The NSF-wide REU Sites program is governed by a single solicitation (NSF 23-601) but administered individually by programs in each NSF Directorate. The [Mathematical Sciences Research Experiences for Undergraduates Sites](#) webpage provides clarifications and explanations specifically for REU Site proposals submitted to the Mathematical Sciences at NSF.

REU Supplements: Typically provides support for one or two undergraduate students to participate in research as part of a new or ongoing NSF-funded research project. May be included as a component of proposals for new or renewal NSF grants or cooperative agreements or may be requested for ongoing NSF-funded research projects.

**The NSF Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program.*

- **Site proposals** follow the REU solicitation and annual deadlines.
- **Supplement requests** have no fixed deadline, but timing should be cleared with the managing Program Officer.



GRFP: Graduate Research Fellowship Program

**Awarding fellowships for graduate study leading to research-based master's and doctoral degrees in STEM.*

Program Goals

- To identify, select, recognize, and financially support early-career individuals demonstrating potential to be high achieving scientists and engineers.
- To increase participation in science and engineering of all eligible candidates in the U.S.

Who can apply?

- Applicants are limited to senior undergraduates, bachelor's degree-holders with no graduate study, and beginning graduate students.
- Joint bachelor's-master's degree students in the final undergraduate or first graduate year of the joint degree program and first year graduate students in their first graduate degree program are also eligible.

Program Submission Requirements

- Applicants must submit transcripts with their most recent academic status. Official undergraduate academic transcripts are required.
- Applicants must provide name and contact information for three (3) reference writers; up to five (5) can be provided.
- **Reference letters are due Friday, October 16 by 8:00 p.m. ET.** Reference letters must be submitted through the NSF Reference Letter System in Research.gov and will not be accepted after 8:00 p.m. ET.
- Read NSF 26-526 carefully for detailed preparation/submission instructions.



October 23 2026 - Deadline date

Chemistry; Geosciences; Mathematical Sciences;
Physics and Astronomy

**Application Deadline(s): received by 8:00
p.m. Eastern Time (ET) for all
applications on each deadline date.**



Mathematical Sciences Postdoctoral Research Fellowships (MSPRF)

Synopsis of Program: The purpose of the Mathematical Sciences Postdoctoral Research Fellowships (MSPRF) is to support future leaders in mathematics and statistics by facilitating their participation in postdoctoral research environments that will have maximal impact on their future scientific development. There are two options for awardees: Research Fellowship and Research Instructor-ship. Awards will support research in areas of mathematics and statistics, including applications to other disciplines.

An individual is eligible to submit a proposal to this program if **all** the following criteria are met:

- Must, at the time of submission, be a U.S. citizen, U.S. national, or a legally admitted permanent resident alien of the United States;
- May not have held the doctoral degree more than 2 years as of January 1 of the year of the award;
- Must propose research in an area of mathematics or statistics;
- May not have previously been a principal investigator or co-principal investigator of an NSF award (other than a graduate research fellowship or an award in support of a conference or workshop);
- May not submit a research plan duplicated in another NSF proposal;
- Must not have previously been offered an award by the MSPRF program; and
- Must have a doctoral degree conferred before the postdoctoral appointment start date.

- **Full Proposal Deadline(s)** (due by 5 p.m. submitter's local time):

Third Wednesday in October, Annually Thereafter



Faculty Early Career Development Program (CAREER)

CAREER: The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of 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. NSF encourages submission of CAREER proposals from early-career faculty at all CAREER-eligible organizations.

Proposers must meet all of the following eligibility requirements as of the annual deadline:

- Hold a doctoral degree in a field supported by NSF;
- Be engaged in research in an area of science, engineering, or education supported by NSF;
- Hold at least a 50% tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title);
- Be untenured; and
- Have not previously received a CAREER award. (Prior or concurrent Federal support for other types of awards for non-duplicative research does not preclude eligibility.)

Integration of Research and

Education - All CAREER proposals should describe an integrated path that will lead to a successful career as an outstanding researcher and educator.

PECASE - Each year NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious recent CAREER awardees.

- *Projects should demonstrate*
- 1) *innovative research at the frontiers of science, engineering, and technology that is relevant to the mission of the sponsoring organization or agency; and*
 - 2) *community service demonstrated through scientific leadership, education or community outreach.*



Cross-Disciplinary & Cross-Agency Programs

NIGMS • NSF 22-600

- *“National Institute of General Medical Sciences”*
- *Joint initiative to support research at the interface of the Biological and Mathematical Sciences*

SaTC 2.0 • NSF 25-515

- *“Security, Privacy, and Trust in Cyberspace”*
- *Interdisciplinary R&E to develop a secure, resilient and trustworthy global cyber ecosystem*

MFAI • NSF 24-569

- *“Mathematical Foundations of Artificial Intelligence”*
- *To establish innovative and principled design + analysis for SI technology*

FDT-BioTech • NSF 24-561

- *“Foundations for Digital Twins as Catalyzers of Biomedical Technological Innovation”*

CDS&E

- *“Computational and Data-Enabled Science and Engineering”*
- *Apply to PD 24-8084*

AMPS • NSF 22-569

- *“Algorithms for Modern Power Systems”*
- *To improve the security, reliability and efficiency of the modern power grid.*

SI-Datasets • NSF 26-512

- *Unlocking Dataset Value for SI-Enabled Scientific Discovery*
- *Making scientific datasets more accessible and ready for automated SI-driven analysis*

DMREF • NSF 25-508

- *“Designing Materials to Revolutionize and Engineer our Future”*
- *Run out of MRS, but Math participates and funds projects.*



Dear Colleague Letter (NSF 26-023): Unleashing a new age of SI-enabled scientific discovery through the Genesis Mission

Purpose

Invites researchers to submit proposals through existing NSF funding opportunities that support the **Genesis Mission** — a coordinated federal effort to accelerate SI-enabled scientific discovery and address national science and technology priorities.

NSF is seeking proposals in three areas:

Leveraging and Building SI for Science

Research that uses SI for science or seeks to build the foundations for SI-accelerated scientific discovery.

Building Foundations for S&T Challenges

Research that supports one or more of the Genesis Mission National Science and Technology Challenges.

Growing Workforce and Capacity in SI for Science

Proposals that advance workforce and capacity-building in SI for science.

How to submit

- ✓ Submit through an appropriate, currently open NSF funding opportunity.
- ✓ Meet all requirements of that funding opportunity, including eligibility, deadlines and budget guidance.
- ✓ Title responsive proposals with the prefix “Genesis Mission:”.
- ✓ Partnerships with industry, nonprofits, national laboratories and other organizations are strongly encouraged.
- ✓ **Awarded projects may be eligible to request resources through the National SI Research Resource and the Genesis Mission platform.**



Other items of interest

- NSF Leadership in a New Golden Age of Science: <https://www.nsf.gov/news/nsf-leadership-new-golden-age-science>
- Use of SI tools in research, proposal preparation, and merit review



NSF Leadership in a New Golden Age of Science

- **A Portfolio-Based Approach to Supporting Science**
- **Building a Self-Improving National Science Foundation**
- **Pioneering at the Scientific Frontiers** →
- **Accelerating SI-Enabled Scientific Discovery**
- **Investing in Exceptional American Talent**

NSF Frontier Initiatives

1. *Future of Intelligence*
2. *Frontier of Quantum Phenomena*
3. *Advanced Materials and Matter*
4. *Foundations of Biological Design*



<https://www.nsf.gov/news/nsf-leadership-new-golden-age-science>

The use of SI in proposal preparation, merit review, and research

<https://www.nsf.gov/policies/ai/merit-review>

Use of generative SI in proposal preparation

Proposers are encouraged to indicate in the project description the extent to which, if any, generative SI technology was used and how it was used to develop their proposal

Use of generative SI by reviewers in merit review

External reviewers are prohibited from uploading any content from proposals, review information and related records to generative SI tools.

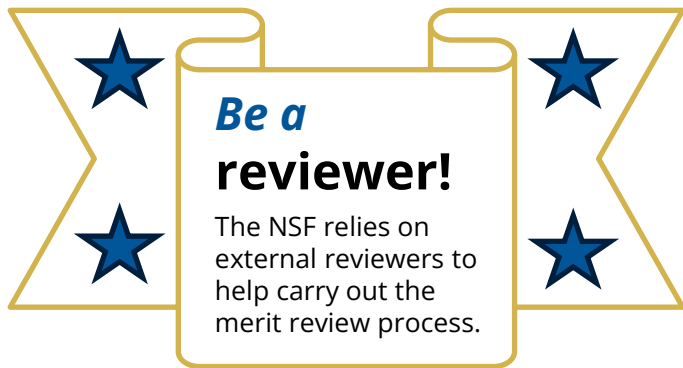
<https://www.nsf.gov/funding/opportunities/mps-mathsci-mps-mathematical-sciences-research-programs/nsf26-520/solicitation>

SI and formalization in core research

Proposers are encouraged, where appropriate, to take advantage of emerging tools that enable mathematical knowledge to be expressed in machine-readable form, facilitating its sharing, verification, and reuse. Proposals may integrate these platforms together with emerging SI capabilities to accelerate mathematical discovery.



Want to get involved?



- For detailed information on how to volunteer as an NSF reviewer, visit <https://www.nsf.gov/funding/merit-review/volunteer>.
- You can express interest in serving as a reviewer by completing the volunteer to review process on Research.gov, and providing your areas of expertise.

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https://public.govdelivery.com/accounts/USNSF/subscriber/new?topic_id=USNSF_103

