NSF Overview / Funding

Coastal Pioneer Southern Mid-Atlantic Bight (MAB) Array Community Workshop



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The U.S. National Science Foundation (Mission)

The U.S. National Science Foundation (NSF) is an independent federal agency created by Congress in 1950*.



➤ NSF is the only federal agency that supports research across all fields of science and engineering and STEM education at all levels.



NSF invests in curiosity-driven, discovery-based explorations and use-inspired, solutions-focused innovations that spur new technologies, are critical to our economic and national security, and cultivate the diverse STEM workforce of tomorrow.



*National Science Foundation Act of 1950 (Public Law 81-507)

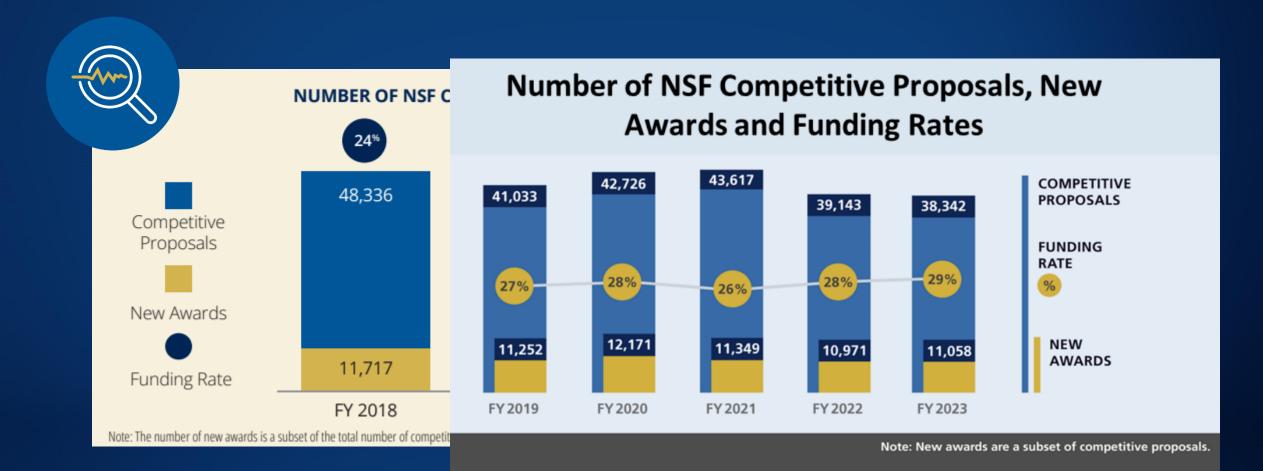


NSF's FY 2025 Request: 3 Pillars, 4 Themes





NSF Funding Trends





NSF Focus (established NSF)

- Curiosity driven basic research, with some exceptions (e.g., TIP Directorate)
- Developing new understanding (as opposed to knowledge, information, data or products).

Two types of funding opportunities:

https://new.nsf.gov/funding/opportunities

- ✓ Core programs (sustained over the long term, standard grant, RAISE, EAGER, RAPIDS)
- ✓ Special solicitations (transient, ~5-year life cycle, e.g., PREVENTS, CoPe, CHIRRP, see GEO/RISE)

Special announcements:

✓ Dear Colleague Letters (DCLs, Informational, glimpse to future special solicitat.)



NSF / OCE Programs



Core Science
Programs

Division of Ocean Sciences (OCE)



OCE Facilities







Physical Oceanography (PO)

Ocean Education (incl. OCE PRF)

NSF Ocean Observatories Initiative (OOI)

Ocean Tech. & Interdisc. Coordination (OTIC)

U.S. Academic Research Fleet (ARF) & Deep Sub

Scientific Ocean Drilling































Division of Ocean Sciences and provides professional development with a focus on developing mentoring skills to broaden participation of underrepresented groups in STEM.

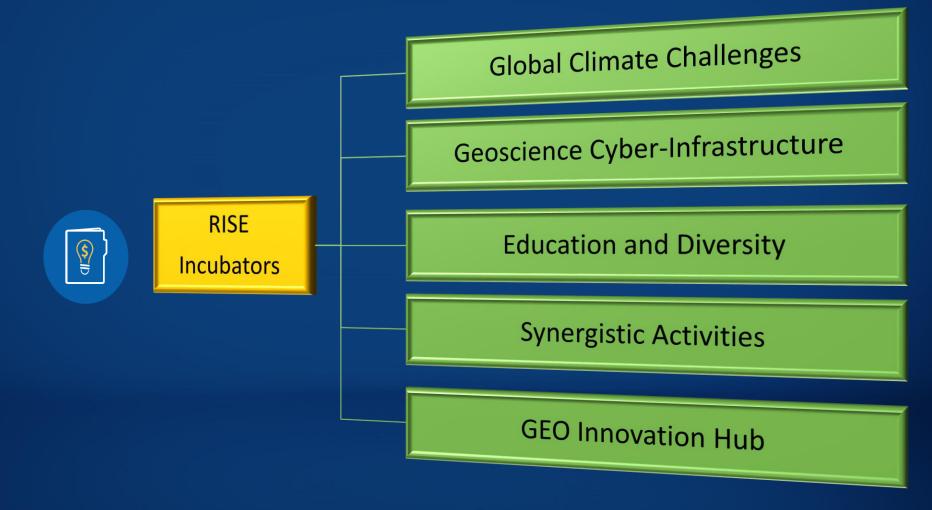
Full proposal 2023 November 10 2023 - Target date C Second Friday in November, Annually Thereafter

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NSF / GEO Research, Innovation, Synergies, and Education (RISE) Division





FORECAST

Focus On Recruiting Emerging Climate and Adaptation Scientists and Transformers (NSF 24-558)

Facilitate transition from undergraduate to graduate programs or entrepreneurial positions in STEM fields through student-centered preparation and institutional capacity building

Confronting Hazards, Impacts and Risk for a Resilient Planet (PD 24-297Y)

A resilient planet, present and future, requires understanding how Earth system hazards impact communities and developing actionable solutions to reduce risk. CHIRRP is a bold, strategic initiative to catalyze convergent Earth system science, build community partnerships and generate actionable solutions to safeguard communities and ecosystems for a resilient planet.

https://new.nsf.gov/funding/opportunities









This document is the current version.

NSF 24-595: Regional Resilience Innovation Incubator (R2I2)

Program Solicitation



Document Information

Document History

• Posted: August 8, 2024

Download the solicitation (PDF, 1.6mb)

View the program page



U.S. National Science Foundation

Directorate for Geosciences

Division of Research, Innovation, Synergies, and Education Directorate for Technology, Innovation and Partnerships Innovation and Technology Ecosystems

Translational Research with Regional Foci **10 U.S. Climate Regions**

r2i2@nsf.gov



Letter of Intent Due Date(s) (required) (due by 5 p.m. submitting organization's local time):

December 16, 2024

Full Proposal Deadline(s) (due by 5 p.m. submitting organization's local time):



What's Unique About R2I2?

EC2H

Extreme, Compound, and Cascading Hazards

CHIRRP

Confronting Hazards, Impacts and Risks for a Resilient Planet

R212

CA Convergence Accelerator
RIE Regional Innovation Engines



DISCIPLINARY

PROGRAMS

Core (or disciplinary) programs in Divisions in Geosciences Directorate: AGS, EAR, OPP, OCE





TRANSDISCIPLINARY



TRANSLATION

Spanning beyond a single core program
For example, special topics Dear Colleague Letters

Solutions-oriented research that engages partners across disciplines and sectors to generate knowledge to address critical societal challenges.

Research approach that produces meaningful, applicable results by bridging the gap between knowledge gained through research and the use of research results in policy and/or practice.



CAIG

Collaborations in Artificial Intelligence and Geosciences (NSF 24-518)

Supports development of advanced AI methods for geosciences research and associated educational and technical efforts to build capacity for adoption of AI-driven approaches by geoscientists.

- Advances development and adoption of innovative artificial intelligence methods to increase scientific understanding of the Earth system
- Supports projects that advance AI techniques and innovative uses of sophisticated or novel AI methods to enable significant breakthroughs in addressing geoscience research
- Supports efforts to increase adoption of innovative Al-driven approaches among geoscientists, including expanding access to cyberinfrastructure and building capacity for use of Al methods among diverse groups and institutions





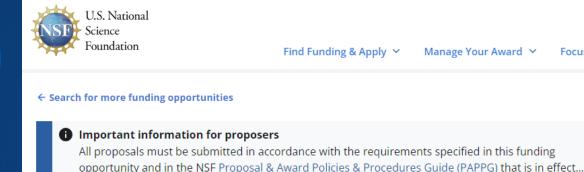
https://new.nsf.gov/funding/opportunities

Find Funding & Apply >

Manage Your Award ∨

Focus Areas >









Encourages submission of proposals for projects that use/reuse long-term environmental data to advance understanding of ecological and evolutionary questions.



With this Dear Colleague Letter (DCL), the U.S. National Science Foundation (NSF) seeks to stimulate and encourage the use and reuse of data from environmental time series research to improve generalizable understanding in fields including (but not limited to) ecology, organismal evolution/adaptation, geoscience, and oceanography.



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News & Events

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Print

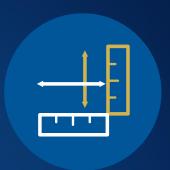
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About Y





NSF Proposal Evaluation Criteria



NSF evaluates proposals submitted to open, competitive research calls using two merit review criteria:

- The Intellectual Merit criterion encompasses the potential to advance knowledge
- The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes



Broader Impacts – a non-exclusive list

- full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM);
- improved STEM education and educator development at any level;
- increased public scientific literacy and public engagement with science and technology;
- improved well-being of individuals in society;
- development of a diverse, globally competitive STEM workforce;
- increased partnerships between academia, industry, and others;
- improved national security;
- increased economic competitiveness of the United States; and
- enhanced infrastructure for research and education.





NSF Proposal Preparation Resources



- Proposal and Award Policies and Procedures Guide (**PAPPG**) describes required elements and format for NSF proposals*
 - Note: this is updated almost every year; watch for changes



- Program Announcements (incl. DCLs) may have information on eligibility, goals, special requirements
 - Related: make sure you understand data policies



• Program Officers – current; also, former rotators



 Reviewer / Panel / Program Comments on unsuccessful proposals (keep calm, put aside for a few weeks, re-read)



OCE Proposal Submission / Review Specifics

- > Core OCE science programs (PO, CO, BO, MGG) use a combination of mail and panel review
 - OTIC uses mail review only
- > Proposal submission dates
 - MGG and BO accept proposal submissions at any time
 - CO and PO still have two target dates per year: February 15 and August 15
 - OTIC has one target date per year: February 15
- ➤ We co-review proposals all the time between OCE programs, and with programs in other parts of NSF
 - If you have any questions about the fit of your proposal to a program or programs, contact one (or more) of us!
- For proposals with ship time: include a ship time request (<u>www.unols.org</u>) as a supplementary document in your proposal
- > OCE CAREER proposals
 - The Ocean Education Program co-reviews all OCE CAREER proposals, and co-funds the awards. The Education component and its evaluation are important!





Welcome to the





Coastal Pioneer Southern Mid-Atlantic Bight (MAB) Array Community Workshop





Have a productive meeting!

















