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

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Webinar Topics

- FORECAST Goal
- FORECAST Solicitation (NSF 24-558)
- Proposal Preparation and Submission
- Useful Resources
- Q&A Session



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The National Academies of
SCIENCES • ENGINEERING • MEDICINE

CONSENSUS STUDY REPORT

**NEXT GENERATION
EARTH SYSTEMS SCIENCE
AT THE
NATIONAL SCIENCE FOUNDATION**



National Science Foundation

**ENGAGED RESEARCH FOR ENVIRONMENTAL GRAND CHALLENGES:
ACCELERATING DISCOVERY AND INNOVATION FOR SOCIETAL IMPACTS**

JULY 2022



PREPARED BY:
ADVISORY COMMITTEE FOR ENVIRONMENTAL
RESEARCH AND EDUCATION



FORECAST Overarching Goal

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



Innovation



Entrepreneurship



Community-Focused
Resilience Science



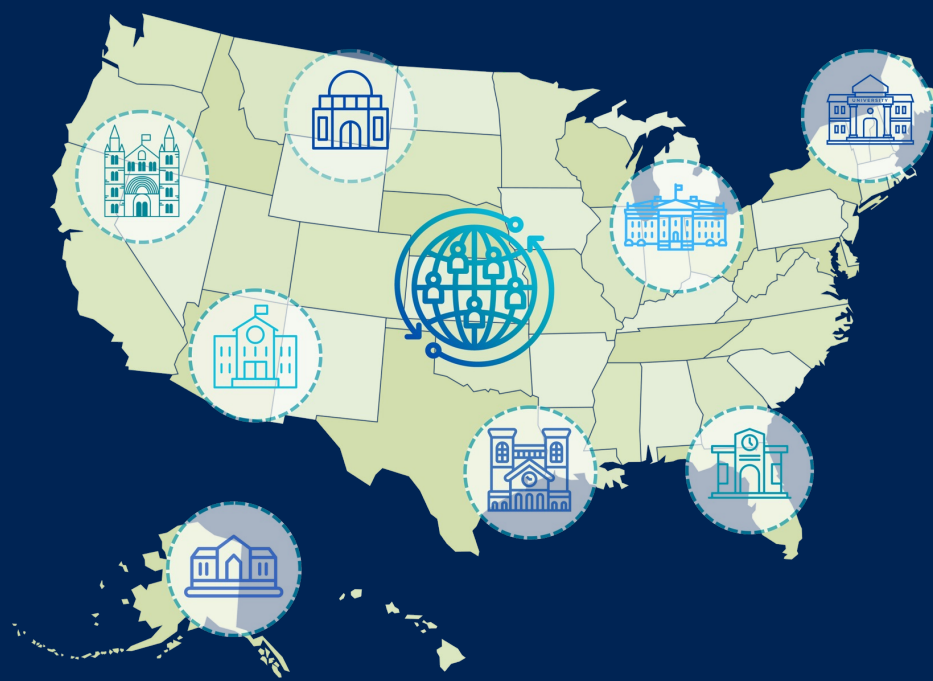
Student Centered



Central Coordinating Hub:
Facilitates professional development for
rising senior and graduate student cohorts



Institution Centered



Emerging Research Institutions:
Develop cohorts of Master's students in
partnership with community partners

A Few Definitions

- **Transformers** are scientists ready to tackle the challenges the nation and world are facing due to climate change.
- **Engaged research** is research conducted via meaningful collaboration among scientist and non-scientist actors, that explicitly recognizes the benefits of engaging community members, entrepreneurs, communication experts and others in the development of research questions to enable new discoveries and rapidly translate scientific discoveries to address society's grand challenges.
- **Innovation** is a dynamic process in which new ideas turn into practical value in the world.
- **Translation** is an approach to research that seeks to produce more meaningful, applicable results. This is fundamentally about bridging the gap between knowledge gained through research and the use of research results in policy and/or practice.



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Funding Tracks

**Track 1:
Coordination Hub**

**Track 2: Emerging
Research
Institutions**

Planning Grants



Track 1

Coordination Hub (1 award)

- 5-year award
- Up to \$7.5 million total
- Responsibilities
 - Oversee national cohorts of rising seniors from historically excluded groups or ERIs
 - Develop, design, and deliver professional development for Track 1 participants; coordinate Track 2 professional development
 - Manage funding for all Track 1 participants
 - Connect and foster the broader FORECAST community
- Cooperative agreement



Track 1

Coordination Hub

Phase 1

- **At least 2 national cohorts** of senior undergraduate students (at least 25 students/cohort)
- Must use NSF **ETAP** for application and selection
- 1 yr. professional/entrepreneurial development – translational research, engaged research, innovation
- Student-designed projects focused on community and/or campus climate resilience
- Equivalent of 40 hours of training across academic year



Track 1

Coordination Hub

Phase 2

- Phase 1 participants can continue receiving support during the first two years of graduate program (MS or PhD) at school of their choice
- Phase 2 participants called FORECAST Associates
- FORECAST Associates will continue to receive professional development and support to conduct projects developed in Phase 1
- FORECAST Associates receive educational allowance; may also accept fellowships, tuition assistance, etc.



Track 2

FORECAST Cohorts at Emerging Research Institutions (~5 awards)

- Master's degree granting ERIs
- 4-year awards
- Up to \$4 million total



Track 2

FORECAST Cohorts at Emerging Research Institutions (~5 awards)

- Track 2 projects should:
 - Train cohorts of Master's degree graduate students
 - Minimum of 6 students/cohort
 - Minimum of 2 cohorts
 - Build institutional capacity in translational, engaged research to address challenges related to global change
 - Include introduction to broader governmental context of climate resilience



FORECAST Planning Grants

- MS degree granting ERIs
- Build capacity at institution and with appropriate partners
 - Support team formation activities
 - Develop and nurture relationships with potential partners
 - Access specialized frameworks or resources needed to better develop a Track 2 project
- 12-month awards
- Up to \$100,000



FORECAST Planning Grants

- Institutions interested in both preparing to host a Track 2 project and ensuring institution is fully inclusive and welcoming to project participants
 - Training staff, conducting climate surveys, or establishing collaborations and partnerships
- Should include plans for expansion, sustainability, and scaling of activities
- Can organize catalytic activities to help collaborating organizations to crystallize vision to address transdisciplinary grad student cohort and build entrepreneurial and translational capacity at the institution
- May include a small pilot program and adequate evaluation



Guidance

- Competitive Planning Grants, Track 1 and Track 2 proposals will
 - Be based on inclusive research and training principles
 - Prioritize strategic partnerships while developing an entrepreneurial mindset in participants
 - Be rooted in mentorship, ally-ship, equity, anti-racist and anti-harassment practices, and increasing accessibility
 - Show commitment to fostering research and learning environments with a strong sense of belonging and safety for all
- If seeking support for existing activity, must clearly demonstrate effectiveness of current activities and identify gaps that would be addressed if additional resources were made available



Award Information

Planning Grants

- Up to 12 months
- Up to \$100K
- ~10 awards

Track 2 Awards

- Up to 48 months
- Up to \$4M
- ~5 awards

Track 1 Award

- Up to 60 months
- Up to \$7.5M
- 1 award;
cooperative
agreement



Eligibility Information: Track 1

- Two- and four-year IHEs
- Non-profit, non-academic organizations
 - Independent museums
 - Observatories
 - Research labs
 - Professional societies



Eligibility Information: Track 2 and Planning Grants

- MS degree-granting Emerging Research Institutions (ERI)
- **ERI definition**: Institutions of higher education with an established undergraduate or graduate program that have less than \$50M in Federal research expenditures
- NSF 24-308, the Higher Education Research and Development (HERD) Survey, Table 24 will be used to determine institutional eligibility



Eligibility Information: Limits on PIs

- There are **no restrictions or limits** on who may serve as a PI.
- An individual may serve as a PI or Co-PI on **only one** proposal submitted to this solicitation. No exceptions will be made.



Eligibility Information: Limit on Number of Proposals per Organization

- FORECAST does not accept separately submitted collaborative proposals; any collaborations should be through a subaward
- An eligible organization may only submit up to (2) proposals
 - Organizations participating only as evaluators or subawardees are excluded from this limit
- Proposals from ERIs designated as Minority Serving Institutions are encouraged



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Proposal Preparation Instructions

Overview of Proposal Components

- Cover Sheet
- Title of Proposed Project
- Project Summary (1 page)
- Project Description
 - Track 1: 20 pages max
 - Track 2: 15 pages max
 - Planning Grants: 8 pages max
- References Cited
- Biographical Sketches (2 pages max)
- Budget and Budget Justification
- Data Management Plan
- List of Project Personnel
- Safe and Inclusive Fieldwork Plan



Budget Preparation

- Student Participant and FORECAST Associate Support
 - Student and FORECAST Associate stipends will be paid in line with U.S. Government General Schedule (GS) – fosters livable wage
 - See <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2024/general-schedule>
 - Track 1 Phase 2 student educational allowance of \$40,000 per year for up to two years
- Other Budget Items
 - FORECAST Project Coordinator (50-100% appointment)
 - Project evaluator
 - PI Meeting in Washington, DC



Proposal Submission

Full Proposal Submission Guidance

Refer to the PAPPG Chapter II.C.2 for guidance on the required sections of a full proposal submitted to NSF. Note that the solicitation takes precedence and may deviate from the PAPPG guidance.

Proposal Submission Mechanisms

- [Research.gov](https://www.research.gov)
- [Grants.gov](https://www.grants.gov)



NSF Merit Review

All NSF proposals are evaluated through two merit review criteria.

- **Intellectual Merit** – the potential to advance knowledge.
- **Broader Impacts** – the potential to benefit society and contribute to the achievements of specific, desired societal outcomes.



Additional Review Criteria: All Tracks

Integration of Diversity, Equity, Inclusion, and Accessibility into NSF Programs, Projects, and Activities: What is the quality of the recruiting and retention plans to broaden participation? Is there evidence of sufficient engagement of key personnel? Are collaborations and/or existing programs appropriately engaged?

Evaluation: Does the evaluation plan include outcomes, performance measures, benchmarks, and an evaluation timetable, as well as a description of how formative evaluation will improve practice? Are research and educational activities addressed? Is there a plan to share insights, practices, and findings broadly? Will the evaluation and monitoring plan provide sufficient documentation that project goals and outcomes have been realized?



Additional Review Criteria: All Tracks

Reviewers will be instructed to evaluate the *Safe and Inclusive Fieldwork Plan* within the Broader Impacts review criterion, specifically:

- Is there a compelling plan (including the procedures, trainings, and communication processes) to establish, nurture, and maintain inclusive off-campus or off-site working environment(s)?
- Does the proposed plan identify and adequately address the unique challenges for the team and the specific off-campus or off-site setting(s)?
- Are the organizational mechanisms to be used for reporting, responding to, and resolving issues of harassment, should they occur, clearly outlined?



Additional Review Criteria: Track 2

Community Partnerships: Does the proposed project have existing authentic community partnerships or a clear plan on how these will be established in an equitable and respectful manner?

Sustainability: Does the proposed project have a feasible plan for program activities to persist beyond the duration of the award?



Proposal Deadlines

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

January 29, 2025

Deadline for Track 1 "Coordination Hub" proposals

April 30, 2025

Deadline for Track 2 and Planning Grant proposals

April 29, 2026

Deadline for Track 2 and Planning Grant proposals

April 28, 2027

Deadline for Track 2 proposals



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Useful Resources

- [FORECAST Solicitation: NSF 24-558](#)
- Proposals & Award Policies & Procedures Guide (PAPPG), January 22, 2024: <https://new.nsf.gov/policies/pappg/24-1>
- Research.gov: www.research.gov and Grants.gov: www.grants.gov
- Prospective New Awardee Guide, June 2020: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pnag
- RISE Reporter: subscribe on the nsf.gov website
- Questions? Email: geoforecast@nsf.gov



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Virtual Office Hours / Q&A Sessions

Next Office Hours

June 10, 2024: 4 – 5 p.m. Eastern Daylight Time

June 13, 2024: 3 – 4 p.m. Eastern Daylight Time

- Registration information can be found on the FORECAST program page on [nsf.gov](https://www.nsf.gov)
- Additional office hours will be scheduled as the proposal deadlines approach – subscribe to the RISE Reporter to stay informed
- Questions? Email: geoforecast@nsf.gov



Questions?