

Engineering Research Initiation (ERI)

NSF 22-595

Webinar

Deadline: September 15, 2023



ERI Goals

- The main goal of the ERI program is to ***broaden the base*** of scientists and engineers in academia who dedicate their careers to advancing engineering research and education in societally important fields relevant to ENG.
 - Synergistic with NSB Vision 2030
- This solicitation provides ***support for investigators who have yet to receive research funding from Federal Agencies*** to initiate their engineering research.
- NSF encourages submission by new investigators in engineering fields from ***non-PhD awarding institutions, including community colleges***.
 - ERI is limited to investigators that are not affiliated with “very high research activity” R1 institutions
- NSF strongly ***encourages participation*** in this ERI program by PIs from all underrepresented groups in engineering.



ERI History

- ERI ran for the first time in 2021.
 - Solicitation: NSF 21-574
 - 93 awards made.
- Current solicitation: NSF 22-595.
 - Next deadline: September 15, 2023
 - Previous Deadline: October 11, 2022
 - Review is ongoing.

Good to know:

- Senior Personnel Allowed
 - Catalyze partnership
- Equipment costs may be included to support research.
- Must submit to a specific participating ENG program.



The ERI competition is different.

**Proposal Deadlines:
September 15, 2023**

- Eligibility criteria (described next)
- Project Description: 10 pages (compare to Unsolicited: 15 pages)
- Chair/Dean's letter: required
- Project Duration: 2 years
- Project Personnel
 - Senior Personnel are allowed.
 - One proposal per person per competition, as either PI or Senior Personnel.



Eligibility (1/2)

Institutional eligibility:

- Institution **not** currently classified as a Doctoral University with “Very High Research Activity” according to the 2021 Carnegie Classification

PI appointment:

- PI must hold an appointment at the institution.
 - Post-docs may not serve as PIs for ERI proposals.

Limits:


- One proposal per person, per deadline.
 - As either PI or Senior Personnel.
 - (Co-PIs are not allowed.)
- No Collaborative Proposals
 - As defined in the PAPPG, Chapter II.D.3.b
- Subawards permitted *only to non-R1 institutions.*



Eligibility (2/2) – PI may not have had prior federal research funding.

At the time of the proposal submission deadline, the PI may not have been a PI, Co-PI or equivalent on any current or prior *awarded* NSF research grant (including subaward) or have had research support from any other Federal Agency (within the United States or abroad), with the following exceptions:

- Conference or travel awards;
- Doctoral dissertation improvement grants and any other award made while the PI was a student, including NSF Graduate Research Fellowships;
- Postdoctoral research fellowship awards that exclusively support pre-tenure-track activities;
- Major Research Instrumentation grants (NSF MRI or equivalent) as PI or Co-PI,
- REU or RET site awards;
- I-Corps, Phase I SBIR, or STTR awards;
- Awards that originated as Federal funds but were distributed locally without naming the submitting ERI PI in the Federal funding proposal (such as: NASA Space Grant Project.); and
- Awards that originated as Federal funds but were not for research purposes (this must be described in the Chair's letter.)



Note: these eligibility restrictions apply to the PI, NOT to Senior Personnel!

In essence: if you've had prior federal RESEARCH support beyond a post-doc, you are NOT eligible for ERI.

Review Criteria

Reviewers are asked to explicitly address these. Think like a reviewer! Make it easy for them to find what you think are the meritorious aspects of your proposal.

1. Intellectual Merit
2. Broader Impact
3. Additional Solicitation Specific Review Criteria:
 - To what extent will the project provide the foundation for sustained scholarly contribution to engineering research?
 - To what extent will the proposed engineering research initiation activities enhance the PI's ability to maintain impactful research activities?



Additional Review Criteria

Required section in Project Description: **ERI Criteria**

- ERI Criteria: Provide a brief description of how the proposed work addresses the solicitation-specific review criteria.

ERI Solicitation-specific review criteria:

- To what extent will the project provide the foundation for sustained scholarly contribution to engineering research?
- To what extent will the proposed engineering research initiation activities enhance the PI's ability to maintain impactful research activities?

One criterion is about the work and scholarly contributions;

The other is about the PI's ability to maintain such activities.



Program Fit

- Your proposal will be reviewed within the program that you choose upon submission.
 - *Caveat: if the NSF Program Director determines that the topic does not fit with the program, it may be transferred to another program for review, or returned without review.*

ENG Unit of Consideration: Research.gov users: Secondary units of consideration may be selected after the proposal is created by clicking on "Manage Where to Apply" in the proposal details section . Grants.gov users should refer to Section VI.1.2. of the NSF Grants.gov Application Guide for specific instructions on how to designate the NSF Unit of Consideration. For assistance in determining which program(s) to choose, refer to the list of ERI-eligible ENG Programs below:

CBET

- Catalysis
- Electrochemical Systems
- Interfacial Engineering
- Process Systems, Reaction Engineering, and Molecular Thermodynamics
- Biophotonics
- Biosensing
- Cellular and Biochemical Engineering
- Disability and Rehabilitation Engineering
- Engineering of Biomedical Systems
- Environmental Engineering
- Environmental Sustainability
- Nanoscale Interactions
- Combustion and Fire Systems
- Fluid Dynamics
- Particulate and Multiphase Processes
- Thermal Transport Processes

CMMI

- Advanced Manufacturing (AM)
- Biomechanics and Mechanobiology (BMMB)
- Civil Infrastructure Systems (CIS)
- Dynamics, Control and Systems Diagnostics (DCSD)
- Engineering for Civil Infrastructure (ECI)
- Engineering Design and System Engineering (EDSE)
- Foundational Research in Robotics (Robotics)
- Humans, Disasters, and the Built Environment (HDBE)
- Mechanics of Materials and Structures (MOMS)
- Mind, Machine and Motor Nexus (M3X)
- Operations Engineering (OE)

ECCS

- Electronics, Photonics and Magnetic Devices (EPMD)
- Communications, Circuits, and Sensing-Systems (CCSS)
- Energy, Power, Control, and Networks (EPCN)

Pro tip:

- Ensure that you are submitting to the right program for your research by contacting the cognizant program director well in advance!



When to contact eri@nsf.gov?

- General ERI questions.
 - Note that we are unable to assist with Research.gov questions – there is a separate Helpdesk for that.
- Good to know:
 - eri@nsf.gov is a shared mailbox.
 - You can expect a reply within about one week.

Upcoming ERI Webinars:

- Tuesday, July 18, 2pm Eastern
- Wednesday, August 23rd, 2pm Eastern

Good to know for proposal submission tips:

- NSF Virtual Grants Conference, June 5-8, 2023.

