Deadline: Nov 11, 2025

NSF 20-558
Research Initiation in Engineering Formation (RIEF)

Directorate of Engineering/Division of Engineering Education and Centers

Logistics

- Please stay muted unless you are speaking
- Use Zoom chat to submit questions during the lecture portion
- Use the ”reactions” > “raise hand” feature to ask a question live
- Real-time captions are available within Zoom

- The presentation slides and webinar recording, excluding Q&A, will be available on the RIEF solicitation site as soon as possible following the webinar.

Your program officer team

Alice Pawley

Matthew Verleger

Email either of us at eer-programs@nsf.gov

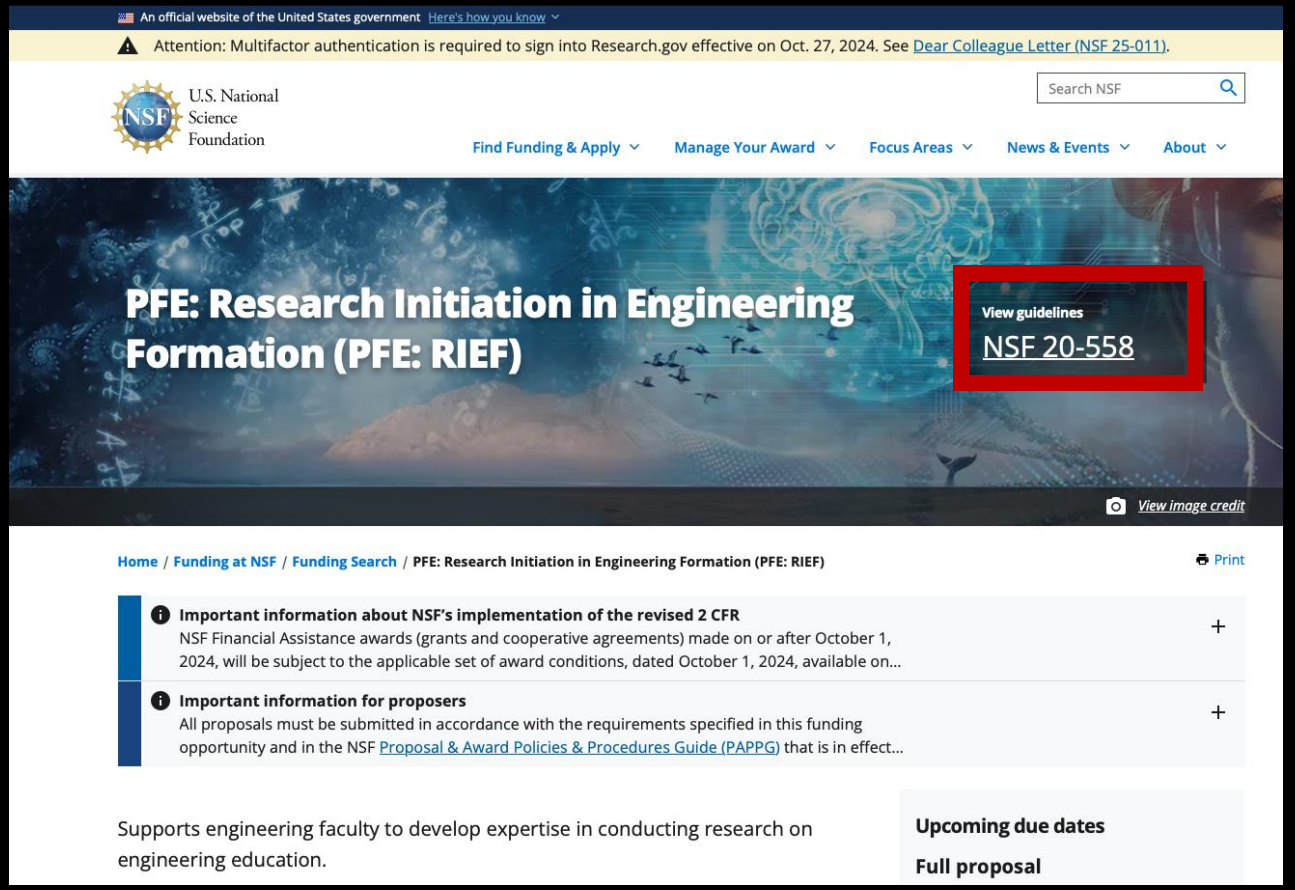
RIEF in the EEC "Engineering Education Cluster"

NSF

- Directorate of Engineering
  - Division of Engineering Education and Centers
    - Engineering Education research cluster
      - RIEF

"NSF 20-558" means

- Program solicitation (so deviates from PAPPG somehow)
- From 2020 (FY 2021?)



NSF 20-558: Research Initiation in Engr Formation ("Reef")

ID number	Year	Title	Review criteria
NSF 11-507	2010	Research Initiation Grants in Engineering Education (RIGEE)	Merit review criteria
NSF 15-539	2016	Professional Formation of Engineers: Research Initiation in Engineering Formation	Merit review criteria
NSF 17-514	2018	PFE: Research Initiation in Engineering Formation (PFE:RIEF)	Merit review and solicitation-specific criteria
NSF 20-558 (current)	2021	PFE: Research Initiation in Engineering Formation (PFE: RIEF)	Merit review criteria and solicitation-specific criteria

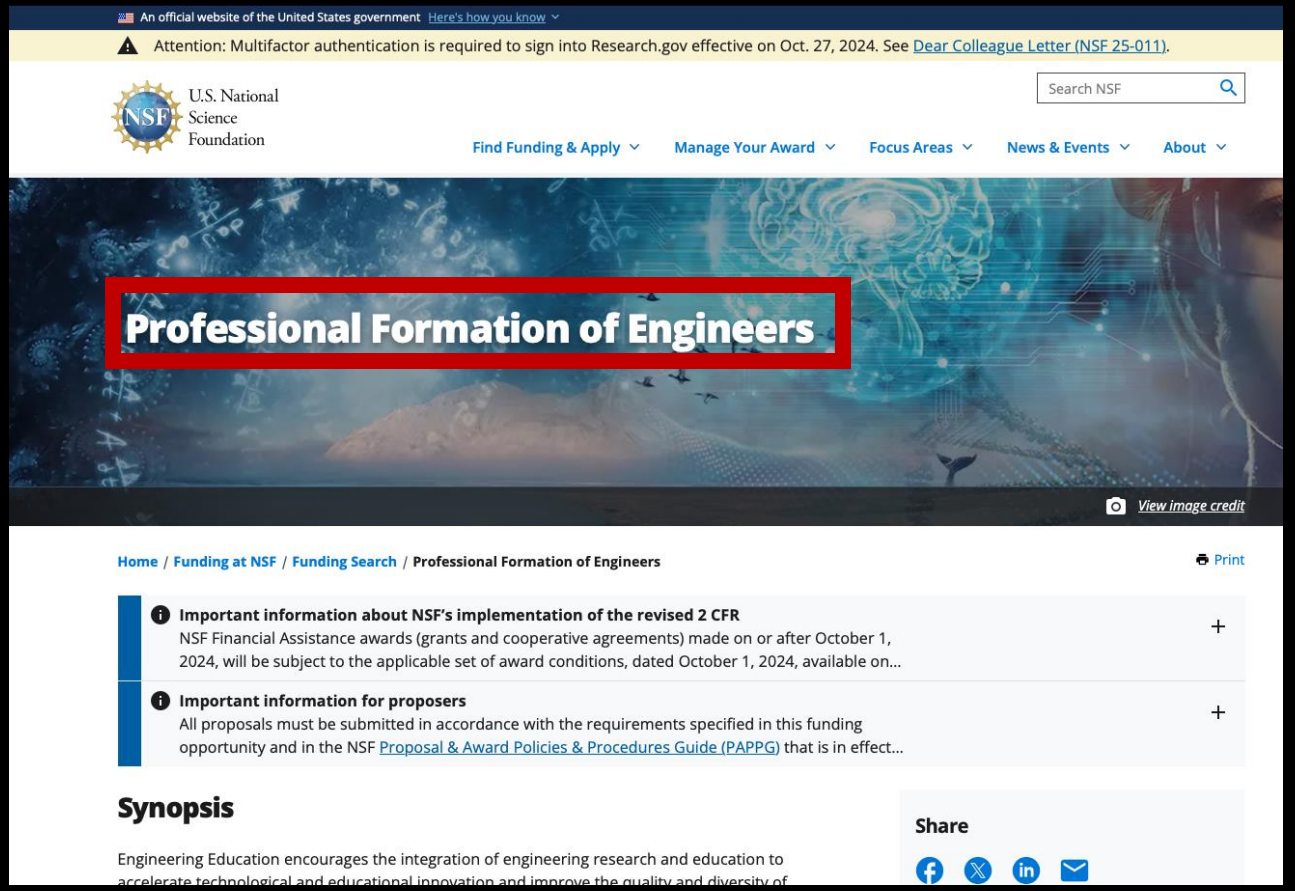
Goal:

1. Support research in the Professional Formation of Engineers (PFE)
2. Increase the community of researchers conducting PFE research.

Say more about “PFE”…

Professional Formation of Engineers relates to:

1. The formal and informal processes and value systems by which people become engineers.
2. The ethical responsibility of practicing engineers to sustain and grow the profession.



What does NSF mean by "research"?

"Common guidelines for educational research"

- Purpose
- Policy or practical significance
- Theoretical and empirical basis
- Project outcomes
- Research plan
- External feedback plan

Credit: Olga Pierrakos

EDUCATION RESEARCH TYPE & GUIDELINES

Justification Guidelines	*Contributes to Core Knowledge*		*Develops Solutions*	*Contributes to Evidence of Impact*		
	1. Foundational Research	**2. Early State or Exploratory Research**	**3. Design & Development Research**	**4. Efficacy Research**	**5. Effectiveness Research**	**6. Scale-up Research**
Purpose	❑ Advance the frontiers of education and learning ❑ Develop and refine theory & methodology ❑ Provide fundamental knowledge about teaching and learning.	❑ Investigate approaches to education problems to establish the basis for design & development of new interventions or strategies, and/or provide evidence for efficacy study	❑ Develop new or improved interventions or strategies to achieve well-specified learning goals or objectives	❑ Determine whether an intervention or strategy can improve outcome under "ideal" conditions	❑ Estimate the impacts of an intervention or strategy when implemented under routine practice conditions	❑ Estimate the impacts of an intervention or strategy under conditions of routine practice and across a broad spectrum of diverse populations and settings
Policy or Practical Significance	❑ Specify and justify research problem(s) to be addressed ❑ Identify research questions	❑ Specify and justify practical education problem(s) or issue(s) to be addressed ❑ Details significance of knowledge to be generated	❑ Specify and justify practical education problem(s) or issue(s) to be addressed ❑ Describes significance & potential of the intervention or strategy	❑ Specify and justify practical education problem(s) or issue(s) to be addressed ❑ Describes significance & potential of the intervention or strategy	❑ Specify and justify practical education problem(s) or issue(s) to be addressed ❑ Describes significance & potential of the intervention or strategy	❑ Specify and justify practical education problem(s) or issue(s) to be addressed ❑ Describes significance & potential of the intervention or strategy
Theoretical and Empirical Basis	❑ Describe and justify theoretical & empirical bases ❑ Describe and justify relevant constructs	❑ Describe and justify theoretical & empirical bases ❑ Describe and justify relevant constructs	❑ Describe and justify theoretical & empirical bases ❑ Describe and justify theory of action or logic model	❑ Describe and justify empirical bases and empirical evidence	❑ Describe and justify empirical bases and empirical evidence	❑ Describe and justify empirical bases and empirical evidence of the support for the intervention or strategy
Project Outcomes	❑ Advance theory, methodology, & understanding of relevant constructs ❑ Include methodological rigor	❑ Include empirical evidence ❑ Specify conceptual framework or theoretical explanation ❑ Include methodological rigor	❑ Include design research ❑ Specify theory of action ❑ Describe design iterations and resulting evidence ❑ Describe empirical evidence and methodological rigor	❑ Detail study goals, design and implementation, data collection and quality, and analysis of findings ❑ Discuss implications of the finding for the theory of action or adjustments	❑ Detail study goals, design and implementation, data collection and quality, and analysis of findings ❑ Discuss implications of the finding for the theory of action or adjustments	❑ Detail study goals, design and implementation, data collection and quality, and analysis of findings ❑ Discuss implications of the finding for the theory of action or adjustments
Research Plan	❑ Describe hypotheses, research questions, and research objectives ❑ Detail study design, study population(s), sampling, methods for data collection, methods for data analysis	❑ Describe hypotheses, research questions, and research objectives ❑ Detail study design, study population(s), sampling, methods for data collection, methods for data analysis	❑ Describe methods for developing the intervention ❑ Detail methods for collecting evidence of feasibility and methods for obtaining pilot data (pilot study)	❑ Detail study design, key outcomes of interest for the impact study, setting(s) and population(s), sampling, methods for data collection, methods for data analysis ❑ Address reliability & validity	❑ Detail study design, key outcomes of interest for the impact study, setting(s) and population(s), sampling, methods for data collection, methods for data analysis ❑ Address reliability & validity	❑ Detail study design, key outcomes of interest for the impact study, setting(s) and population(s), sampling, methods for data collection, methods for data analysis ❑ Address reliability & validity
External Feedback Plan	❑ Include external, critical reviews of its design and activities ❑ Describe plan for continuous improvement of activities and findings	❑ Include external, critical reviews of its design and activities ❑ Describe plan for continuous improvement of activities and findings	❑ Include external, critical reviews of its design and activities ❑ Describe plan for continuous improvement of activities and findings	❑ Include external, critical reviews of its design and activities ❑ Describe plan for continuous improvement of activities and findings	❑ Include external, critical reviews of its design and activities ❑ Describe plan for continuous improvement of activities and findings	❑ Include external, critical reviews of its design and activities ❑ Describe plan for continuous improvement of activities and findings

What goes into proposals, usually? (1)

- PAPPG – “proposal contents”
  - https://www.nsf.gov/policies/pappg/24-1/ch-2-proposal-preparation#d-proposal-contents-171
- Cover sheet (automatically generated)
- Project summary (not an “abstract”; must include broader impact explicitly described) – 1 p
- Table of contents (automatically generated)
- Project Description (15 pages, we’ll come back to this)
- Reference cited
- Budget (produced by your sponsored programs people)
- Budget justification (you write, but use your SPS’s categories).

https://www.nsf.gov/policies/pappg

What goes into proposals, usually? (2)

- PAPPG – “proposal contents”
  - https://www.nsf.gov/policies/pappg/24-1/ch-2-proposal-preparation#d-proposal-contents-171
- Facilities, Equipment and Other Resources
  - No template. Should show reviewers you have the research tools and space to do what you propose to do.
- Senior/Key Personnel Documents – per PI
  - Biosketch – use standard tool
  - Current & Pending – work with your SPS
  - Collaborators and other affiliations – so we avoid your COIs – helps to include the personnel from this proposal!
  - Synergistic activities – what relevant experiences do you have to show you will be able to do what you are proposing?

https://www.nsf.gov/policies/pappg

What goes into proposals, usually? (3)

- PAPPG – “proposal contents”
  - https://www.nsf.gov/policies/pappg/24-1/ch-2-proposal-preparation#d-proposal-contents-171
- Supplementary Documentation
  - Mentoring plan – if the grant would fund a graduate student or postdoctoral researcher. No template. (More in a minute.)
  - Data Management and Sharing Plan
    - ENG: https://www.nsf.gov/eng/data-management-plans
      - Products of research
      - Data formats and standards
      - Dissemination, access, and sharing of data
      - Reuse, redistribution and production of derivatives
      - Archiving of data.
      - Other considerations: IP, IRB, use of AI, who will maintain

https://www.nsf.gov/policies/pappg

What goes into proposals, usually? (4)

- PAPPG – “proposal contents”
  - https://www.nsf.gov/policies/pappg/24-1/ch-2-proposal-preparation#d-proposal-contents-171
- Single copy documents
  - Authorization to deviate from proposal requirements (like if you miss the deadline because of a hurricane.)
  - List of suggested reviewers, or reviewers not to include
  - Any proprietary information (not applicable here)
  - Proposal certifications by your institution (takes time – so build into your timeline for submission.)
    - Includes certification of “safe and inclusive working environments for off-campus or off-site research” which you can request to see
    - Includes proposal certifications from PIs/key personnel (certifying info is true in biosketch, C&P, and malign foreign talent recruitment programs)

https://www.nsf.gov/policies/pappg

Single copy: Mentoring plan (for postdoc/grads)

- For both postdoctoral researchers and graduate student researchers
  - Budget: B. Other Personnel or F. Participant Support Costs
- Limited to one page total
  - (even if both graduate students and postdoctoral scholars are on project)
  - Excess content can be included within Project Description page limit.
- Reviewed under the Broader Impacts criterion
  - Does the plan effectively address both research mentoring and broader career and professional development?
  - Will the mentoring activities support the development of skills and competencies needed for the proposed project? For the trainee's continuing professional growth?
  - Will the mentoring activities help grad students graduate and postdocs advance to their next career step?
  - Does the plan reference the annual use of Individual Development Plans (IDPs) for trainees receiving "substantial" support?

Research or Impacts on Tribal Lands

- Special requirements if you are proposing a project relating to Tribal Nations.
  - Proposals that may impact the resources or interests of a federally recognized American Indian or Alaska Native Tribal Nation (Tribal Nation) **will not be awarded** by NSF without prior written approval from the official(s) designated by the relevant Tribal Nation(s).
  - Proposers seeking NSF funding for such proposals **must…** Include **at least one** of the following:
    - (i) a copy of the written request to the relevant Tribe(s) to carry out any proposed activity/activities that may require prior approval from the Tribal Nation(s);
    - (ii) written confirmation from the Tribal Nation(s) that review and approval is not required; or
    - (iii) a copy of a document from the relevant Tribal Nation(s) that provides the requisite approval.

    All such documentation must be uploaded into "Other supplementary documents" in Research.gov. If only (i) is provided, the proposer will still be required to submit either (ii) or (iii) before NSF will make an award decision.

How are RIEFs different than PAPPG?
(Because program solicitation)

Restrictions on PI

Restrictions on money, timeframe

Required content in project description

Requirements in title

Where solicitation is “silent”, refer to PAPPG for expectations.

RIEF specifics that deviate from PAPPG (1)

	RIEF
Title	Must start with “Research Initiation”
Who?	Beginning researchers in EER - (expertise in other fields, transitioning to EER) • PI must be member of engineering dept and no EER funding from EEC in last 3 years • And a mentor of some kind – with engineering (or STEM) education research expertise. (Can be co-PI, senior personnel, advisor…)
Amount	No more than $200k each
Timeline	No more than 2 years

RIEF specifics that deviate from PAPPG (2)

Project description should EXPLICITLY include:

- Problem definition
- Research design
- Evaluation
  - formative and summative (if you use evaluator, doesn't need to be external to the institution)
- PI mentoring plan
  - different from single copy mentoring plan for grad students and postdocs! Also, that one is also still required, and should be different!
- PI motivation and future plans

- Pro tip: Use these as section headers!

Merit Review Criteria

Why is this project worth taxpayers' investment?

Intellectual Merit (1)

"Encompasses the potential to advance knowledge."

What is your argument that this is worth taxpayers' investment?

1. IM - It's a great idea, with a great plan, as evidenced by grounding in existing research, data, and norms

Intellectual Merit (2)

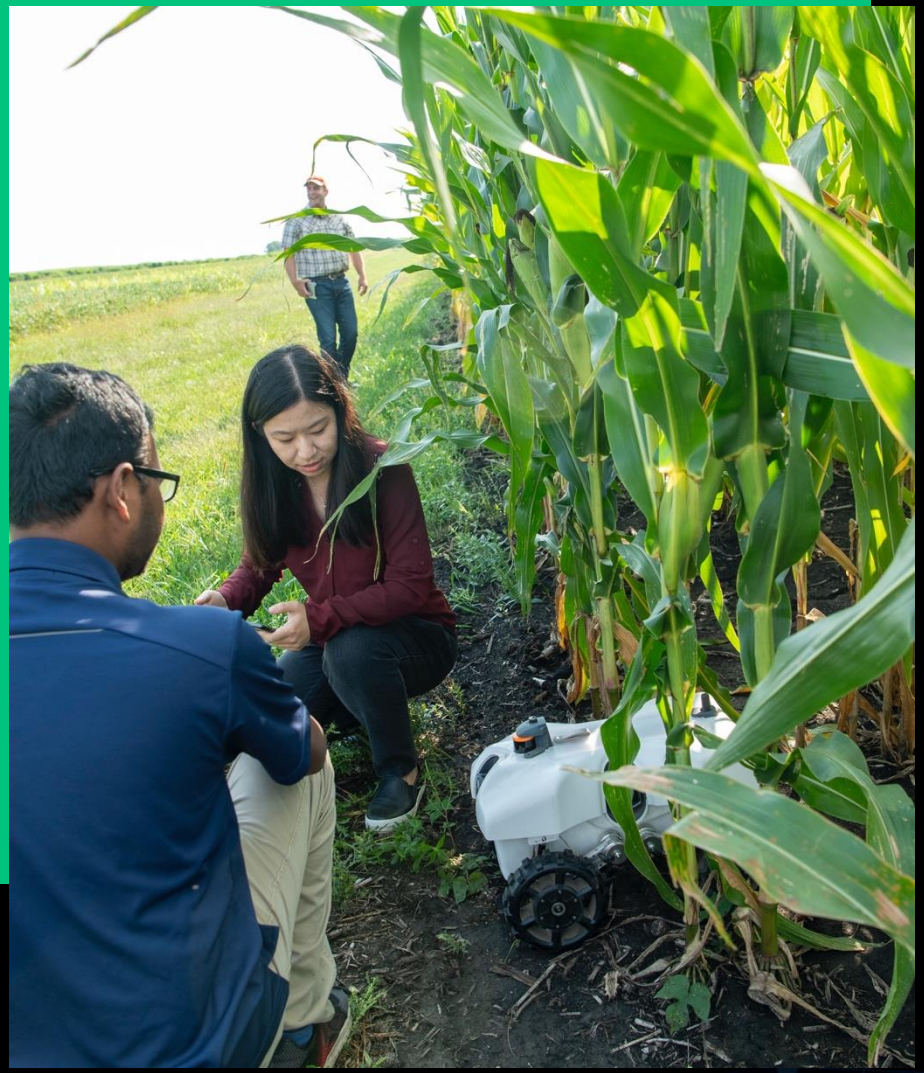
- Should this be done?
  - Will it advance knowledge and understanding?
  - Does it matter within the field and across fields?
  - Does it constitute creative, original, or potentially transformative research?
  - What is the significance of the expected contributions?
- Can this be done? (How well conceived and organized is the proposed activity?)
  - Soundness and feasibility of approach, evaluation, research plan given the resources requested and resources available at the institution
  - How qualified is the team to conduct the proposed research?
  - Will the team's plan curate data appropriately, mentor staff appropriately?
  - Does the team have access to necessary equipment and facilities?

Broader Impacts (1)

What is your argument that this is worth taxpayers' investment?

2. BI – It will benefit society in specific, concrete ways.
    - Inclusion – broadening participation
    - Improve STEM education at any level
    - Increase public science literacy and engagement with STEM
    - Improving societal well-being
    - Developing a better global workforce
    - Build partnerships between academia and industry or others
    - Improve national security
    - Increase economic competitiveness
    - Enhance infrastructure for research and education

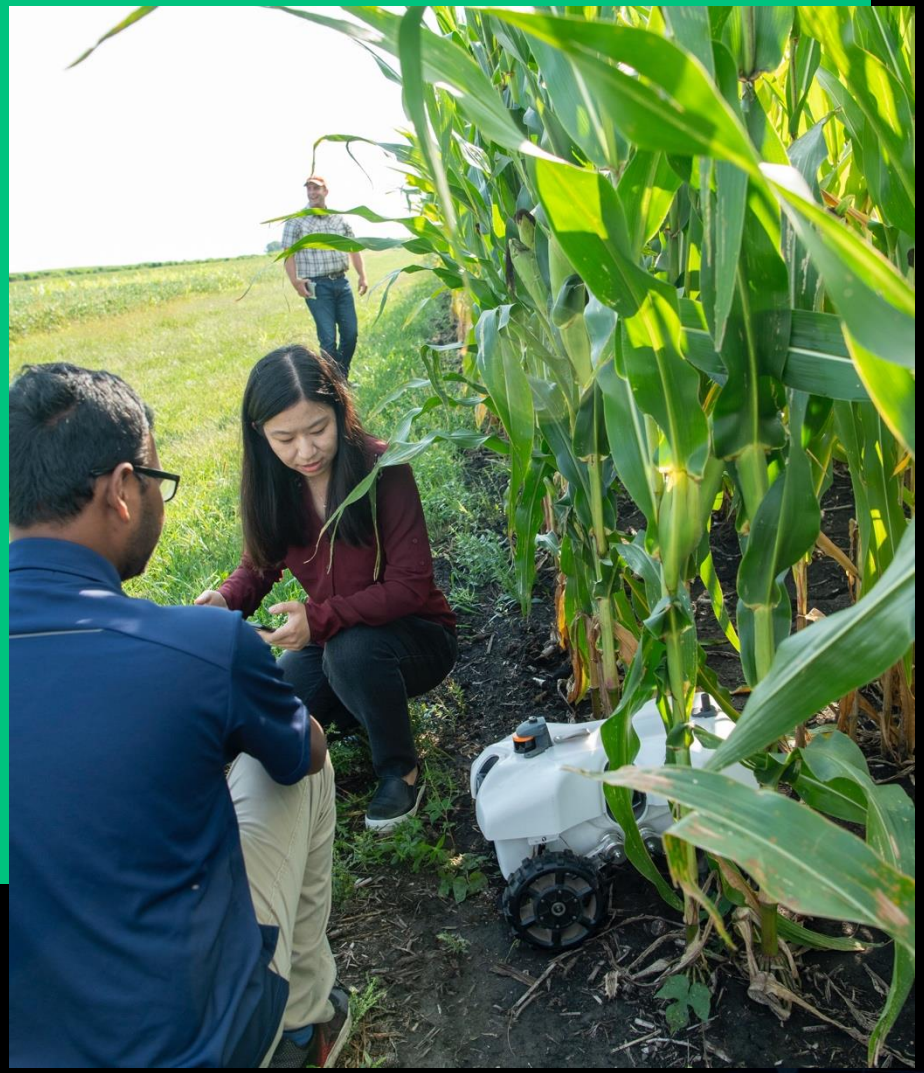
https://www.nsf.gov/funding/learn/broader-impacts



Broader Impacts (2)

Accomplished through

- the research itself;
- activities that are directly related to specific research projects (like postdoc/grad mentoring plan is evaluated as part of BI)
  AND / OR
- activities that are supported by, but complementary to the project.



Merit review criteria - summary

Intellectual merit

1. What is the potential for the proposed activity to advance knowledge and understanding within its own field or across different fields?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader impact

1. What is the potential for the proposed activity to benefit society or advance desired societal outcomes?
2. To what extent do the proposed activities suggest and explore creative, original or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized and based on sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team or institution to conduct the proposed activities?
5. Are there adequate resources available to the principal investigator (either at the home institution or through collaborations) to carry out the proposed activities?

Merit review criteria – specifics (1)

Intellectual merit

1. What is the potential for the proposed activity to advance knowledge and understanding within its own field or across different fields?
2. Project summary; Project description
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader impact

1. What is the potential for the proposed activity to benefit society or advance desired societal outcomes?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized and based on sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team or institution to conduct the proposed activities?
5. Are there adequate resources available to the principal investigator (either at the home institution or through collaborations) to carry out the proposed activities?

Merit review criteria – specifics (2)

Intellectual merit

1. What is the potential for the proposed activity to advance knowledge and understanding within its own field or across different fields?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3.
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader impact

1. What is the potential for the proposed activity to benefit society or advance desired societal outcomes?
2. To what extent do the proposed activities suggest and explore creative, original or potentially transformative concepts?
3.
4. How well qualified is the individual, team or institution to conduct the proposed activities?
5. Are there adequate resources available to the principal investigator (either at the home institution or through collaborations) to carry out the proposed activities?

IM – literature, grounding;
BI –a) how will it make a difference in the work of the PI, the mentor? B) how will it influence the professional formation of engineers? (What difference will it make?)

Merit review criteria – specifics (3)

Intellectual merit

1. What is the potential for the proposed activity to advance knowledge and understanding within its own field or across different fields?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. I
5. A

Broader impact

1. What is the potential for the proposed activity to benefit society or advance desired societal outcomes?
2. To what extent do the proposed activities suggest and explore creative, original or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized and based on sound rationale? Does the plan incorporate a mechanism to assess success?

Project description: research design, timeline, plan for who is driving what.

Assess success: evaluation plan, evaluator, or advisory board (takes $$$)

Budget: participant incentives, PI time, evaluator resources (10%?), EEC PI meeting

Mentoring plan: will this help grad students and postdocs advance their careers as well as do the work you need done??

DMSP: are they working to find a way to share data, even qualitative data? Even with protections?

Merit review criteria – specifics (4)

Intellectual merit

1. What is the potential for the proposed activity to advance knowledge and understanding within its own field or across different fields?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5.

Broader impact

1. What is the potential for the proposed activity to benefit society or advance desired societal outcomes?
2. To what extent do the proposed activities suggest and explore creative, original or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized and based on sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team or institution to conduct the proposed activities?

Project description: PI mentoring plan
PI and mentor: prior NSF support, biosketches, synergistic activities

Merit review criteria – specifics (5)

Intellectual merit

1. What is the potential for the proposed activity to advance knowledge and understanding within its own field or across different fields?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. [illegible]
4. [illegible]
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader impact

1. What is the potential for the proposed activity to benefit society or advance desired societal outcomes?
2. To what extent do the proposed activities suggest and explore creative, original or potentially transformative concepts?
3. [illegible]
4. [illegible]
5. Are there adequate resources available to the principal investigator (either at the home institution or through collaborations) to carry out the proposed activities?

Are you asking for the right resources given what you're proposing?
Do you have what else you need, given what you're proposing and what is in budget?
Facilities and equipment: rooms necessary, library resources, computing and software resources, administrative support, secure data storage, open access publishing repositories etc.

Solicitation-specific criteria

Extent to which the project will expand the community of engineering education researchers	**Merit of the (PI) mentoring plan** *(not the grad/postdoc mentoring plan)*

• the prior experience of the engineering faculty PI.
  • It is expected that the PI will have little or no experience conducting education or social science research.
  • Development of new curricula or education programs does not count as social science research experience, although extensive work evaluating such programs does.
• *EER vs STEM Ed matters!*
	• the extent to which the mentoring plan is clear, well thought out, and practical for developing the research capabilities of the PI;
	• the qualifications of the mentor(s) at providing the necessary mentoring;
	• the extent to which the mentoring plan will provide the PI with the skills and abilities needed to conduct independent research in engineering education.

How do reviewers weight the merit review and solicitation-specific criteria?

- PAPPG requires “full consideration” to each.
- Weighting is up to reviewer expertise and discretion.
- Proposals need to stand on their own merits, not just in comparison to what else is in the panel.

How is RIEF different from BCSER and ERI?

	NSF 20-558 Research Initiation in Engineering Formation (RIEF)	NSF 22-548 EDU Core Research: Building Capacity in STEM Education Research (BCSER) (EDU)	NSF 24-590 Engineering Research Initiation (ERI)
Can you submit Engr Ed research proposals here?	Yes	Yes – multiple tracks (Independent investigator development - New to STEM Ed, Experienced STEM Ed, Institutes, Conferences)	No
Due dates	Nov 11, 2025	Feb 27, 2026	Sept 16, 2025
Funding cap	$200K	IID: $350K	$200K
Timeline	Up to 2 years	IID: Up to 3 years	Up to 2 years
Estimated # of awards	15ish	19 individual investigator awards	55
PIs/co-PI restrictions	PI with limited PRF exp, yes collab, yes co-PI.	None Yes to collabs, yes to co-PIs.	1 PI, no collab, no co-PI
Institution restrictions	All institutions	None	No R1 instit.

Common mistakes

1. Taking lots of space to tell the reviewers the wrong things

- Only talking about broader impacts waaaaaaaaay down the road
- Only describing the magnitude of problems nationally or globally (but not at their own institutions)
- Describing facilities and equipment that have nothing to do with the proposed project
- In the explicit IM and BI sections, getting contributions in the wrong place, and missing obvious contributions. (Line them up with NSF's descriptions and questions!)

At the end of the day, the reviewers need to be able to say that the project is worthwhile and well conceived along IM and BI criteria, and worth the investment. *Help them see that this is true.*

2. Taking not enough space to tell reviewers the right things

- Help the reviewers answer the merit review questions!
- What (specifically) are you going to do with the time and money you receive? When? Who is going to make sure it happens?
- How are the PI and the mentor going to work together such that the PI learns the skills needed at the time that they're needed?
- Where are the plans/descriptions that the solicitation says are required?
- Who is going to care about the outcome of the research, and how are you going to make sure they know what you found out?
  - Is this the right mechanism to teach your audience the thing you found out? (For example – do people really change their course designs or pedagogy because they read a paper of yours or came to your ASEE presentation? What is the research basis for how they do come to change what they do?)

Best practices

1. See what previous RIEF projects have done, and learn from them.

EER Mentor Network: https://sites.google.com/view/eermentornetwork/ (EEC-1914735)

Published papers should be in NSF's PAR - "Public Access Repository" – read and reference them in your proposal.

Active and expired awards funded in PEC 1340 – "Research Initiation" in the title

ASEE papers are online at peer.asee.org.

Contact your program officer if you get stuck.

2. Make a page budget for your project description

Project description	15 pages. How to distribute?
Problem definition	
Research design	
Evaluation – formative and summative	
PI mentoring plan	
PI motivation and future plans	

2. Make a page budget - mistakes

Project description	15 pages. How to distribute?
Problem definition	Literature review yielding research questions – but people spend too much time justifying that it is worthy.
Research design	Not enough detail and specifics here. Who, what, where, why, how, when?
Evaluation – formative and summative	Not enough detail here. Doesn't talk about the expertise of the evaluator or advisory board members. Doesn't include these people on their list of COIs.
PI mentoring plan	Not enough detail and specifics here. Or gets confused and talks about any funded grad students or postdocs (wrong population).
PI motivation and future plans	Only as much as it takes to stay in the page limit. Doesn't talk about the expertise of the mentor.

2. Make a page budget – a better way

Project description	15 pages. How to distribute?
Problem definition	Literature review – 3 pages? Clear statement of RQs: 0.5 page?
Research design	4 pages, including method-specific sources (e.g. not Creswell or other survey method texts). Talks about analysis, pilots. 1 page for timeline
Evaluation – formative and summative	0.5-1 pages?
PI mentoring plan	2 pages, include expertise of mentor and evaluator/advisors
PI motivation and future plans	2 pages?

Not required to do it this way – this is an example!)

3. Involve the right colleagues from the beginning.

- Find good a mentor who can help improve your proposal.
  - Educational researchers, social scientists, change management experts
  - If they're not in EER – how will you access the EER community?
- Find a good evaluator, or advisory board member or two who have the expertise you need.

4. Don’t outsource your work to your staff

- There really isn’t enough money to sufficiently fund a 50% GRA.
  - That’s so you do the work a GRA might normally do, so you learn how to do the things.
- Don’t rely on your evaluator (or mentor) to do all the research collection and analysis.

5. Make sure your project is *research*.

- Not curriculum development. Not developing a teaching innovation and evaluating the impact.
- Instrument development is not ”easy” – and requires extensive expertise that would be hard to develop in this timeframe.
  - Exception –if you have an amazing mentor in this space.
- While not a PhD, kind of like a MS.
- Go back to the Common Guidelines.

6. Make sure to check the new NSF priorities and FAQs relating to the EOs (updated regularly)

- What has changed:
  - No specific activities or data collection (or research questions) focused on demographically-identified “protected groups”.
  - Broadening participation activities about providing access “to all Americans.”
    - Not limited to citizens, though.
- What hasn’t changed:
  - RIEF solicitation
  - Merit review criteria
  - The community of reviewers and what they care about
  - Who receives the award (your institution - and they have to be ok with what you’re submitting (as always).
  - Recruitment or outreach to groups that are not “protected” or identified by institution type or geographic location
- If you are not sure if your idea meets the new agency priorities – set up an appointment with your program officer.

7. Ask your program officers questions

- Book us through our Bookings page or by emailing eer-programs@nsf.gov
  - https://bit.ly/NSF-EEC-EER
- Send a 1-page description of your idea before the meeting (include a description of how you plan to spend the money and time).
- Listen to our feedback, and please make revisions based on it.
- Try to get a subsequent meeting to follow-up!

Final thoughts

- NOTE THE TITLE REQUIREMENTS – “Research Initiation” as prefix
- Deadline: November 11
- Solicitations can change but NSF will provide notice well before deadlines.
- Grant-writing, grant management, and other resources available at the Engineering Education Community Resource: http://engineeringeducationlist.pbworks.com

Thank you!

Send questions to eer-programs@nsf.gov

We'll stop the recording, and move now to Q&A.

Links from the chat

Links from the chat (1)

- Solicitation: https://www.nsf.gov/funding/opportunities/pfe-rief-pfe-research-initiation-engineering-formation
- “Common Guidelines for Educational Research”: https://www.nsf.gov/pubs/2013/nsf13126/nsf13126.pdf
- PAPPG: https://www.nsf.gov/policies/pappg/24-1
  - Part I, Chapter II has the main “Proposal Preparation Instructions”: https://www.nsf.gov/policies/pappg/24-1/ch-2-proposal-preparation
- Link to SciENcv: https://www.ncbi.nlm.nih.gov/sciencv/
  - Also found in the PAPPG section on the “Senior/Key Personnel Documents” - https://www.nsf.gov/policies/pappg/24-1/ch-2-proposal-preparation#ch2D2h

Questions and answers from the chat

Is international travel allowed?

The PAPPG gives details on international travel here: (https://www.nsf.gov/policies/pappg/24-1/ch-11-other-post-award-requirements#f-international-considerations-e74).

Read the full details in the PAPPG, but in general, you do not need NSF permission for international travel unless your institution's policy requests that you get it.

The key restriction is that you have to use a US-Flag Air Carrier if possible.

How do people allocate their budgets?

Comment from a participant: “The reality is that after 1 graduate student and overhead, there is not much leftover for paying the PIs.”

Response from PDs: Right. I would err on the side of paying the PIs over a grad student here because of the goals of the solicitation.