

2023 Webinar for Noyce Research Experiences in STEM Settings (RESS) Projects

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NSF 23-586

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National Science Foundation
WHERE DISCOVERIES BEGIN

General Info on NSF 23-586 and DCL 21-086

- Noyce Program Overview
- RESS Overview (including participant eligibility and budget guidelines)

Question & Answer #1

Preparing the Proposal
Other Resources

Q & A #2



Noyce Program Officer Team



**Kathleen B. Bergin,
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Julio Soto



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Patrice Waller

**RESS
main
contacts
(but any
PO can
help)**



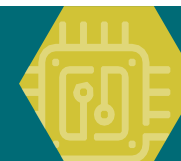
Noyce Program Goals

Address the critical need for recruiting, preparing, and retaining K-12 STEM teachers and teacher leaders in high-need school districts

Support talented STEM undergraduate majors and professionals to become K-12 STEM teachers in high-need school districts

Support experienced, exemplary K-12 STEM teachers to become teacher leaders in high-need school districts

Support research on the effectiveness and retention of K-12 STEM teachers in high-need school districts



Track 1: S&S

Scholarships & Stipends

Undergraduate STEM majors
and/or STEM professionals

Track 2: TF

NSF Teaching Fellowships

STEM professionals

Robert Noyce Teacher
Scholarship Program
Solicitation NSF 23-586

Track 3 (MTF)

NSF Master Teaching
Fellowships

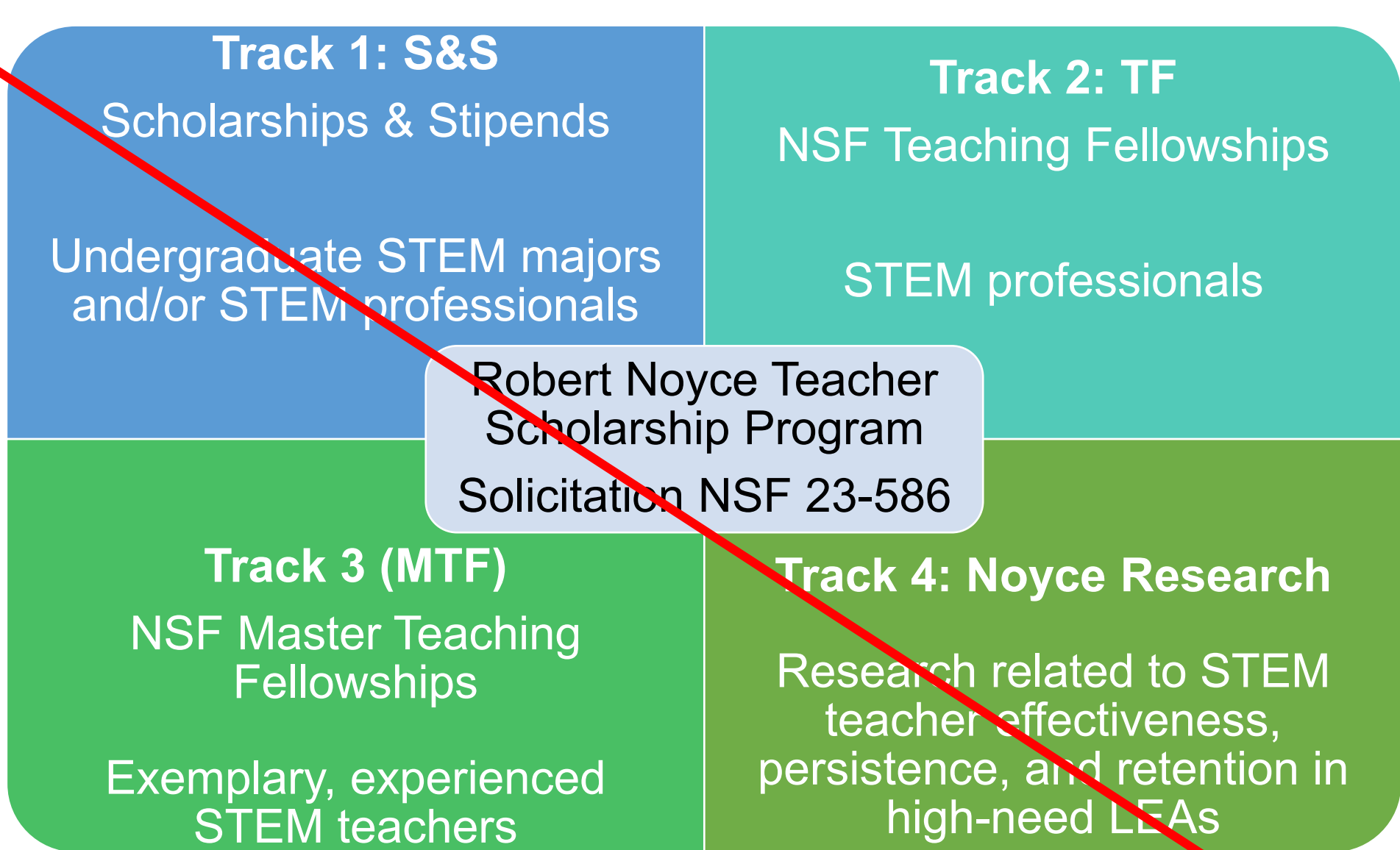
Exemplary, experienced STEM
teachers

Track 4: Noyce Research

Research related to STEM
teacher effectiveness,
persistence, and retention in
high-need LEAs

*Capacity Building projects, which may lead to the development of full proposals for Tracks 1, 2, 3, or 4 are also supported.

RESS projects are not dependent on any of the Noyce tracks, although *if* an institution has a Noyce project they can complement each other.



*Capacity Building projects, which may lead to the development of full proposals for Tracks 1, 2, 3, or 4 are also supported.

RESS

Research Experiences in STEM Settings

Dear Colleague Letter (DCL):
NSF 21-086

Research Experiences in STEM Settings

Deadline: Anytime, pending Program Officer approval

- ❑ Projects provide research experiences for pre-service and/or in-service STEM teachers.
- ❑ Research experiences should be in formal or informal U.S. Research settings (e.g. national or university labs).
- ❑ The inclusion of individuals from diverse backgrounds is strongly encouraged.
- ❑ Project timelines can vary, but are usually 3-5 years.
- ❑ Proposals should describe:
 - The pre-service and/or in-service teacher population that will participate
 - Recruitment and selection processes
 - Planned research and mentoring activities
 - Planned professional development for both teaching and research
 - Desired project outcomes and project evaluation



Principal Investigator (PI)

- No restrictions or requirements for who may serve as PI, but their qualifications should be clear and appropriate for the project.

Co-PIs or Senior Personnel

- Could include STEM faculty who would lead research experiences
- Could include In-service Teacher Mentors and/or Education faculty

Project Team

Pre-service STEM teachers

- Must possess or be pursuing a STEM disciplinary degree (not an education degree, unless a dual degree) as well as teacher certification
- Do not have to be students at the grantee institution(s)

In-service STEM teachers

- Must be currently employed as teachers of STEM subjects in high-need school districts, as defined in the Noyce solicitation
- Do not need to possess a STEM degree but must be certified to teach mathematics, science, engineering, or computer science

Participants*

*do not have to be part of a prior or active Noyce project

Solicitation Guidelines

- The budget should be commensurate with the proposed work and discussed with a Program Officer.
- Budgets are typically between \$350K and \$750K for up to five years.

Additional Advice

- Support participants appropriately
- In addition to stipends, the budget may include funds for research materials, participant housing/transportation/food, travel to local or national conferences (both participants and PIs), etc.

Budgets

Formative and Summative Feedback

- What are the intended project outcomes?
- What objective feedback will be given, when, and how?
- Consider whether an independent evaluator or advisory board is appropriate.
- Determine who will lead evaluation and provide evidence of their expertise (e.g. biosketch)

Dissemination

- What will be proactively shared with the STEM community and how?
- How generalizable or transferable is your approach/model?

Note: There is no specific education research requirement for RESS projects, either for the main project or participants.

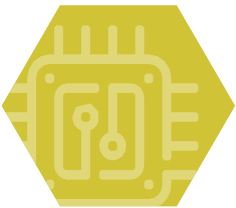
Evaluation

Questions to Consider

- How will your project foster authentic STEM discipline research experiences for preservice teachers who are STEM majors?
 - Have you described the research topics and activities sufficiently so that reviewers can see the picture of what participants will do?
 - Have you described the qualifications of the STEM faculty who are leading and mentoring with the research experiences? Do they need any additional training?
- How will your project help participants develop professionally and make connections between STEM research and teaching? How will the STEM research translate into their teaching and classrooms?
- What aspects of the project are likely to contribute to the knowledge base of STEM teacher preparation and professional development?



Q & A # 1



Proposal

Preparation

Before Submission

The PI must meet with a Noyce Program Officer. Please prepare the following.

1-2 Page Summary

- Briefly describe the intended participant pool, the planned research projects, and other professional development or teaching-related activities.
- Describe the intellectual merit and broader impacts of the project.

Budget

A full budget is not needed at this point, but have a tentative timeline and budget in mind.

Contact a PO

Email a Noyce PO. Any of them should be able to help or redirect you.

If you receive approval to submit...

- Although RESS proposals may be submitted at any time, consider submitting in time for the regular Noyce deadline in August. This will facilitate the review process.
- In the submission, include a copy of the confirmation email you got from a Noyce PO approving your proposal.
- Once you have a proposal number, send that to the Noyce PO from whom you received permission to submit.



Project Description

See the Proposal and Awards Policies and Procedures Guide (PAPPG) for general NSF proposal requirements.

Must be clearly identified, in any order, in no more than 15 pages:

Broader Impacts

Rationale

Project Plan- including research experiences

Connections: participants' research and teaching

Participants- Recruitment and Selection

Assessment of Project Outcomes

Results from Prior Support (if applicable)

Project Management

Note: NSF no longer requires a section entitled

Intellectual Merit

However, Intellectual Merit remains one of NSF's two core merit review criteria and must be evident from the content of your proposal.

■ [Solicitation NSF 23-586](#) and [DCL 21-086](#)

■ [Noyce Program webpage](#)

■ [www.nsfnoyce.org](#)

■ [https://aaas-arise.org/](#)

■ NSF Proposal and Award Policies and Procedures Guide (PAPPG), [NSF 23-1](#)

Critical Resources

Cognizant Noyce Program Directors

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Dr. Kimberly Tanner ktanner@nsf.gov

Dr. Patrice Waller pwaller@nsf.gov

Contact Program Director in August of the submission year if you are not submitting a proposal and interested in serving as a program reviewer.



Upcoming Noyce Events

- There were previous webinars about Track 1, 2, 3, and Capacity Building proposals. Those were recorded and are available on the webinar info webpage: <https://www.nsfnoyce.org/proposal-preparation-workshops/>
- Webinar Track 4: The Noyce Research Track
 - **June 8th (1-2 pm ET)**
- Upcoming Noyce Deadline: **August 29, 2023** by 5pm local time
- Visit the [Noyce Program webpage](#) and www.nsfnoyce.org for additional updates and upcoming events



Q & A # 2

