

Robert Noyce Teacher Scholarship Program, [NSF 17-541](#) 2019 Proposal Writing Webinar

Webinar Focus: Track 4: Noyce Research Track



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Division of Undergraduate Education

Webinar Outline

- Track 4: Research Track NSF 17-541
 - Funding Levels
 - Important Notions, Factors & Resources
 - Grantee Eligibility

Q & A #1

- Preparing the Proposal
- Merit Review Criteria

Q & A #2

- Proposal Writing Tips

Q & A #3



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 17-541

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, or 3, are also supported.



No Previously Funded
Noyce Projects Required

Researchers + STEM
faculty + STEM
education faculty

Up to \$800K
for up to 5 years

Noyce Projects
Substantively Involved

Researchers +
Noyce projects +
STEM faculty +
STEM education
faculty

Up to \$800K + \$100K for
each Noyce project not
to exceed \$2.3M
for up to 3 years

Track 4 (Noyce Research)
Research on teacher
effectiveness, persistence,
or retention in a high-need
school district



FOCUS MUST BE ON: STEM Teacher **effectiveness**, **persistence**, or **retention** in high-need school districts (HNSD).

Examples of possible research studies:

- Teacher characteristics or programmatic features predictive of highly effective teachers who persist in teaching in HNSDs
- Persistence of Noyce Scholars or Fellows as teachers in HNSDs beyond their service requirement
- Identify characteristics of HNSDs that result in retention of STEM teachers

Note: These are just examples and do not span the scope of research studies possible to examine STEM teacher effectiveness, persistence or retention in HNSDs.



More important factors to attend to

Research studies **must** include:

- Substantive collaboration among STEM faculty, STEM education faculty, and researchers in education (and/or the social, behavioral, and economic sciences)
- Theory which underlies the research design
- Provide appropriate methodologies & strategies
- Contribute to the knowledge base of scholarly research in STEM education
- Objective external feedback



Common Track 4 Weaknesses

- Studies that involve examination of only a single institution's teacher preparation program are discouraged unless the proposal provides a compelling argument that the results can be generalized to the larger community.
- Failure to address effectiveness, persistence or retention in HNSD
- Failure to clearly articulate the research questions, their relationship to the data to be collected, the methods of analysis, and the project's ability to authoritatively answer the research questions.



Critical Resources

- Solicitation 17-541 (required)
- Proposal and Award Policies and Procedures Guide (PAPPG), NSF 18-1 (required)
- *Common Guidelines for Education Research and Development*
- Design-Based Implementation Research (DBIR) tenets
- nsfnoyce.org



Eligibility for a Noyce Grant

Proposals may be submitted by:

- One or more universities, four-year colleges, and/or two-year colleges; or
- U.S. nonprofit entities that have established consortia among such institutions of higher education (IHE); or
- Professional societies and similar organizations that are directly associated with educational or research activities (for Track 4: Noyce Research only)

No restrictions on the number of proposals per organization

No restrictions on the number of proposals (or tracks) per PI or Co-PI



Q & A # 1

15 minutes



Proposal Due Dates for NSF 17-541

- Tuesday, August 27, 2019 for FY20 funds
- Last Tuesday of August, Annually Thereafter

Note: No new Noyce solicitation was released in 2019.



Project Summary (1 page)

Overview: The first sentence **must** -

- Indicate the specific Track of the proposal (e.g., S&S); and
- Name all institutions, including high-need local educational agencies and non-profit organizations as appropriate, that are involved in the proposal.

Intellectual Merit (*How important is this work & how well designed is the project?*)

Broader Impacts (*What is the benefit of this work to STEM Education, to society?*)



Intellectual Merit & Broader Impacts

(Required)

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



Q & A # 2

15 minutes



General Tips for Success

1. Be aware of other projects and advances in the field.
2. Cite the literature.
3. Include details and all requirements per solicitation.
4. Discuss prior (including Noyce) NSF results.
5. Include plan for objective external feedback (evaluator or advisory board) w/ timelines and benchmarks.
6. Propose a cost effective but high impact project.
7. Put yourself in the reviewers' places.
8. If resubmitting previously declined proposal, consider reviewers' feedback. Do not resubmit same declined proposal.
9. Have someone else read the proposal.
10. Call or email cognizant Noyce Program Officers.



Other EHR Programs of Possible Interest

- Improving Undergraduate STEM Education (IUSE: EHR [NSF 17-590](#))
- EHR Core Research (NSF 19-508)



Cognizant Noyce POs

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If you are interested in serving as program reviewer and not submitting a proposal in 2019, contact a cognizant PO in August.



Q & A # 3

15 minutes

