



NATIONAL SCIENCE FOUNDATION
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NSF 21-053

Frequently Asked Questions (FAQs) for for NSF NSF 21-536, NSF Research Traineeship (NRT) Program

1. What is a trainee?
2. What is a traineeship?
3. Can international students be NRT trainees?
4. On which specific national research priorities is the NRT Program focused?
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8. Does the fact that "Education" is not included in the "NRT" title mean that NRT will fund more proposed hands-on training and less classroom instruction?
9. Referring to the "Diversification Strategy" (section 3h (ii)), are we being asked to develop evidence-based strategies to broaden participation of students from diverse backgrounds, or are we being asked to apply evidence-based strategies that are already in practice?
10. Are there preferred types of formative or other assessments (section 3i) that we should include to evaluate the traineeship, or should these assessment approaches and instruments be unique to the model we are proposing?
11. Can we use an evaluator who is employed at the lead or collaborating institution of the NRT proposal?
12. Is there a limit on cost of education that can be charged to the grant?
13. Will NRT Traineeship Track proposals with external evaluators receive more preference

than proposals with internal evaluators?

14. Can I propose an NRT project for a non-research-based Professional Master's program?
15. Can NRT projects include international partners?
16. Will we need Institutional Review Board (IRB) approval of the evaluation activities and instruments described in our proposal?
17. How will keywords submitted in the Project Summary be used?
18. Will a project that focuses on a master's only program receive lower preference than projects involving doctoral students only or both doctoral and master's students?
19. Will proposals that do not meet the eligibility requirements for submission be returned without review?
20. What is the make-up of the review panel? Will proposals be evaluated mainly on the merits of the educational models we propose, or will they also be evaluated on the merits of the proposed research topics?
21. Can R2 institution submit to both Tracks? Also, can an R1 Minority Serving Institution (MSI) submit to Track 2?
22. Can small equipment and supplies for the trainee be considered?
23. Can the 12-month \$34K NRT trainee stipend be distributed over more than a year?
24. How are Track 2 proposals going to be evaluated? Will Track 2 proposals, which are limited to non-R1 institutions, be evaluated separately from Track 1 proposals?
25. Are Track 2 proposals competing with the Track 1 proposals?
26. How many co-PIs and how many other senior personnel are allowed in a proposal?
27. How many departments or colleges should be represented on our NRT? E.g., we plan to have investigators from three departments of our college (i.e., civil engineering, electrical engineering, and mechanical engineering) in our proposal? Is our team diverse enough?
28. How can we indicate institutional support for the proposed project in our proposal without compromising NSF rules against voluntary committed cost sharing?

1. **What is a trainee?**

A trainee is a research-based STEM graduate student (MS or PhD) who is accepted

into the institution's NRT program and is expected to complete all the required program elements as described in the proposal. Trainees do not have to receive stipend and tuition support directly from the NRT award. They can be supported from a variety of sources including research assistantships, teaching assistantships, fellowships, or other funding.

2. What is a traineeship?

A traineeship is focused on students and their technical and broader professional development. In the case of NRT, a traineeship involves a strong institutional commitment to mentoring STEM graduate students and the development of their technical and transferrable professional skills (e.g., teamwork, ethics, communications, teaching, leadership, and project management) for a variety of STEM careers. It should be noted that training in communication, ethics, and teamwork is a required part of the NRT proposals. NRT includes a focus on the students' overall development as STEM professionals, in addition to their conducting cutting-edge interdisciplinary research.

3. Can international students be NRT trainees?

Yes, they can be trainees and fully participate in any NRT program elements (e.g., courses, workshops, and internships). However, NRT stipends plus customary costs of education for stipend-supported trainees are restricted to U.S. citizens, nationals, and permanent residents.

4. On which specific national research priorities is the NRT Program focused?

For FY2021, Artificial Intelligence (AI) and Quantum Information Science and Engineering (QISE) have been added to the national priority areas in which the NRT Program encourages proposals. We seek proposals on any interdisciplinary research theme of national priority, with special emphasis on AI and QISE and the six research areas within NSF's 10 Big Ideas. The NSF research Big Ideas are Harnessing the Data Revolution (HDR), The Future of Work at the Human-Technology Frontier (FW-HTF), Navigating the New Arctic (NNA), Windows on the Universe: The Era of Multi-Messenger Astrophysics (WoU), The Quantum Leap: Leading the Next Quantum Revolution (QL), and Understanding the Rules of Life: Predicting Phenotype (URoL).

5. Can we submit an NRT proposal addressing a national research priority that is outside the priorities included in the solicitation?

Yes, but please provide justification to support the argument that the research theme is of national importance.

6. If master's and doctoral students are included in one NRT project, how much overlap in their training is expected and/or preferred?

Proposals should clearly define the training approach(es) for trainees at all participating student degree levels. Potentially, some training-specific methodologies could be suitable for both master's and doctoral students together while others might be better suited for master's or doctoral students, separately.

7. Can we propose funding for the improvement of a training model that is not entirely new but is certainly not (yet) broadly adopted?

An NRT proposal may include funding to expand or improve a current training model, but the potential added value should be substantial and potentially transformative.

8. Does the fact that "Education" is not included in the "NRT" title mean that NRT will fund more proposed hands-on training and less classroom instruction?

No, training could include classroom instruction.

9. Referring to the "Diversification Strategy" (section 3h (ii)), are we being asked to develop evidence-based strategies to broaden participation of students from diverse backgrounds, or are we being asked to apply evidence-based strategies that are already in practice?

Proposals should describe in detail: the evidence base for the recruiting, mentoring, retention, and broadening participation strategies; the rationale for strategies that will be used to pursue diversity goals; and successes of any existing recruiting or retention programs that will be leveraged through the project.

10. Are there preferred types of formative or other assessments (section 3i) that we should include to evaluate the traineeship, or should these assessment approaches and instruments be unique to the model we are proposing?

It is up to the proposers to identify the types of formative and other assessment approaches and instruments. However, assessment plans should be formulated and designed to regularly inform and improve the NRT project.

11. Can we use an evaluator who is employed at the lead or collaborating institution of the NRT proposal?

Yes. Please note if a project chooses to involve an individual or team from the lead or collaborating institution(s) in the evaluation, then the project must provide justification and explain how to mitigate the potential for bias.

12. Is there a limit on cost of education that can be charged to the grant?

The institution can budget for customary costs of education (tuition, health insurance,

and required fees) for NRT trainees while they are receiving NRT stipend support. You may offer a discounted tuition rate if this is a customary practice for federally-funded trainees, research assistants, and/or fellows at your institution and not a practice solely for the NRT trainees.

13. Will NRT Traineeship Track proposals with external evaluators receive more preference than proposals with internal evaluators?

No. However, if an internal evaluator is used, the institution must provide justification and explain how lack of bias is ensured.

14. Can I propose an NRT project for a non-research-based Professional Master's program?

No, research is integral to the NRT program. Non-research-based professional master's students are eligible to participate in NRT Traineeship activities; however, they cannot be considered "trainees" (See #1 for a definition of "trainee") by the program and are ineligible to receive NRT stipend support. NRT trainees must be in a research-based degree program that requires a thesis or dissertation.

15. Can NRT projects include international partners?

Yes, NRT projects may include international partners if they provide significant added value to the projects. However, international partners cannot be sub-awardees and funds for their participation must be drawn from non-NSF sources.

16. Will we need Institutional Review Board (IRB) approval of the evaluation activities and instruments described in our proposal?

If your proposal is successful and awarded, you will need to provide official documentation from your institution's IRB confirming either that the planned activities involving human subjects have been approved or that your project is exempt from IRB approval.

17. How will keywords submitted in the Project Summary be used?

The keywords will be used to identify research areas addressed in the submitted proposals and assist in assigning proposals to review panels.

18. Will a project that focuses on a master's only program receive lower preference than projects involving doctoral students only or both doctoral and master's students?

No, all proposals will be evaluated based on their merit. Projects involving master's students, Ph.D. students, and both master's and Ph.D. students will be evaluated

equally.

19. Will proposals that do not meet the eligibility requirements for submission be returned without review?

Yes, proposals that do not comply with the solicitation will be returned without review (RWR). The eligibility conditions include who may submit proposals and serve as a PI, limits on the number of proposals per organization, and limits to number of proposals per PI or Co-PI. In past, not providing the Demographic table (section 3h(i) of the Project Description) has been one of the key reasons for RWR.

20. What is the make-up of the review panel? Will proposals be evaluated mainly on the merits of the educational models we propose, or will they also be evaluated on the merits of the proposed research topics?

NRT panels typically include disciplinary experts, administrators who run interdisciplinary programs, diversity experts, evaluators, and PIs from ongoing NRT projects. Proposals will be evaluated equally on the merits of both the proposed research and the educational models.

21. Can R2 institution submit to both Tracks? Also, can an R1 Minority Serving Institution (MSI) submit to Track 2?

Yes, an R2 institution can submit to both Tracks. However, an R1 MSI cannot submit to Track 2.

22. Can small equipment and supplies for the trainee be considered?

Yes, as long as the proposed items support the proposed research and traineeship experiences. Please make sure this request is well justified in the budget justification. Also, please note that the NRT is not an equipment grant program.

23. Can the 12-month \$34K NRT trainee stipend be distributed over more than a year?

Yes. While the stipend amount is the minimum for a 12-month appointment, this appointment and stipend may be distributed over multiple years.

24. How are Track 2 proposals going to be evaluated? Will Track 2 proposals, which are limited to non-R1 institutions, be evaluated separately from Track 1 proposals?

Proposals for both the tracks will be evaluated together using the standard NSF review criteria and NRT-specific criteria. Reviewers from both R1 and R2 institutions will be included in the panels.

25. Are Track 2 proposals competing with the Track 1 proposals?

No. Proposals in Tracks 1 and 2 will compete with other proposals in the same track.

26. How many co-PIs and how many other senior personnel are allowed in a proposal?

A maximum of four co-PIs is allowed, in addition to the PI. NRT proposals are allowed to have up to 10 core participants, including PI, co-PIs, senior personnel, lead evaluator, and/or other collaborators.

27. How many departments or colleges should be represented on our NRT? E.g., we plan to have investigators from three departments of our college (i.e., civil engineering, electrical engineering, and mechanical engineering) in our proposal? Is our team diverse enough?

While there is no minimum number of departments or colleges that should be represented, typically, successful NRT projects include experts and trainees in areas that would merit support from an average of three NSF Directorates (for example: Engineering, Biological Sciences, and Mathematical & Physical Sciences). The number of departmental units or experts represented should be sufficient, and sufficiently engaged, to meet the NRT program's goal to promote interdisciplinary or convergence research. NSF defines convergence research as: "means of solving vexing research problems, in particular, complex problems focusing on societal needs. It entails integrating knowledge, methods, and expertise from different disciplines and forming novel frameworks to catalyze scientific discovery and innovation." See <https://www.nsf.gov/od/oia/convergence/index.jsp>.

28. How can we indicate institutional support for the proposed project in our proposal without compromising NSF rules against voluntary committed cost sharing?

For NSF purposes, the term "voluntary committed cost sharing" means cost sharing specifically pledged on a voluntary basis in the proposal's budget. The proposed budget should not include matching support from the institution. Institutional support may be indicated in various ways. The institutional support letter provided by your campus administrator in support of the NRT proposal may refer to institutional programs, facilities, or resources that may be leveraged by the proposed project as well as forms of financial support for trainees. We advise you not to include dollar amount equivalents in such documentation. It is also permissible to describe the institution's role in sustaining various elements of the proposed NRT program once the grant period is over. For additional guidance, see the NSF cost sharing policy in the [Proposal and Award Policies and Procedures Guide \(PAPPG\) Chapter II.C.2.g\(xii\)](#).