Limited Submission Funding Opportunity

NSF Research Traineeship (NRT) Program


PLEASE NOTE THE SHORT TIMELINE

FOA#: NSF 15-542

Proposals are invited in two tracks: the Traineeship Track (maximum 5 years, $3.0 million), dedicated to the education of STEM graduate students through an innovative, evidence-based traineeship approach in high-priority interdisciplinary research areas; and the Innovations in Graduate Education (IGE) Track (2–3 years, up to $300,000–$500,000) dedicated solely to piloting, testing, and evaluating bold, new graduate-education approaches, models, and activities and to generate the knowledge required for their customization, implementation, and scaling.

A. Traineeship Track
The Traineeship Track is dedicated to highly effective training of STEM graduate students in an interdisciplinary research area through a comprehensive traineeship approach that comprises elements that are innovative, evidence-based, aligned with changing workforce and research needs, and scalable. NRT trainees must be master’s and/or doctoral STEM students in a research-based degree program that requires a thesis or dissertation. The goals of the Traineeship Track program are to:

- Catalyze and advance cutting-edge interdisciplinary research in high priority areas,
- Increase the capacity of U.S. graduate programs to produce interdisciplinary STEM professionals with technical and transferable professional skills for a range of research and research-related careers within and outside academia, and
- Develop innovative approaches and knowledge that will promote transformative improvements in graduate education.

The Traineeship Track has one priority theme — Data-Enabled Science and Engineering (DESE). Particular interests for this priority theme are described in the solicitation.

Other crosscutting, interdisciplinary theme: A theme other than DESE should align with NSF or other national STEM research priority areas and have high potential for development of novel, innovative practices in graduate education.

B. Innovations in Graduate Education (IGE) Track
The IGE Track will extend the impact of the NRT Traineeship approach to generate other potentially transformative models for improvements in graduate education that prepare STEM graduate students for the full range of possible STEM career paths, as well as prepare the next
generation of scientists and engineers who will advance the nation’s STEM enterprise. Master’s students or doctoral students or both can be the target population. Activities proposed may include, but are not limited to, faculty training, student training, inventive partnerships, virtual networks, student professional development, mentoring, or bridges from undergraduate education to graduate education. The IGE Track calls for proposals to:

- Design, pilot and test new, innovative and transformative approaches to STEM graduate education,
- Examine the potential to extend a successful approach developed in one discipline or context to other disciplines, or transfer an evidence-based approach to a new context, and
- Develop test-bed projects that are informed by learning science and the body of knowledge about STEM graduate education.

Leadership teams (PI/Co-PIs) comprising professional expertise in the learning sciences and pedagogy, as well as in the principal science domain(s), are strongly encouraged.

**LIMIT ON NUMBER OF PROPOSALS PER ORGANIZATION**
Each institution may submit two Traineeship Track proposals and one Innovations in Graduate Education Track proposals. If an institution submits only one Traineeship Track proposal, it can be on either DESE or another theme. If an institution submits two Traineeship Track proposals, at least one must be a DESE proposal. In either case (DESE or non-DESE), the traineeship theme of a Traineeship Track proposal must be interdisciplinary.

**KEY DATES**
- Internal Letter of Intent due: February 25, 2015 (by midnight)
- Proposal due to NSF: May 6, 2015

**SUBMITTING A MANDATORY LETTER OF INTENT**
Faculty members interested in applying are required to submit a letter of intent (LOI). An LOI is required but not binding.

1. Click [here](#) to access the LOI form. Use a short informative proposal title that begins either with “NRT-DESE:” for projects with a Data-Enabled Science and Engineering theme or with “NRT:” for projects on another interdisciplinary theme.
2. Name the LOI as follows: “LastName-FirstInitial-LOI-NSF-NRT-2015”, replacing “LastName” with your last name and “First Initial” with your first initial.
3. Click on the Vault ticket: [https://vault2.northwestern.edu/xythoswfs/webui/_xy-e6470839_1-t_Ue9EuAgB](https://vault2.northwestern.edu/xythoswfs/webui/_xy-e6470839_1-t_Ue9EuAgB)
4. Click the Upload button.
5. Click the Browse button and navigate to your file on your hard drive or network.
6. Click the OK button.

Note: You will get a tiny confirmation message upon upload. If you do not see it, you may contact Karen Cielo [k-cielo@northwestern.edu](mailto:k-cielo@northwestern.edu) for a confirmation.
COLLABORATION OPPORTUNITIES
The Office of Research Development offers assistance in identifying and facilitating collaborations, putting together interdisciplinary teams, programmatic and administrative development of large, cross-school proposals, and leveraging institutional resources for outreach and education. Contact Fruma Yehiely (yehiely@northwestern.edu), Director of ORD, for more information.

CONTACT AND ADDITIONAL INFORMATION
Fruma Yehiely, Director of ORD, 847-491-1074, yehiely@northwestern.edu
Limited Submissions web site: http://www.research.northwestern.edu/ord/funding/limited-submissions/