

VUMC Limited Submission Opportunity

2025 NSF Innovations in Graduate Education (IGE) Program

Applications due January 2, 2025

VUMC: These instructions are for VUMC investigators. VU investigators should apply through [InfoReady](#) and address any questions to VU-LSO@vanderbilt.edu.

Overview

VUMC may submit only **2 applications** to the NSF IGE program. [The Innovations in Graduate Education \(IGE\) program](#) is designed to encourage development and implementation of bold, new, and potentially transformative approaches to STEM graduate education training. The program seeks proposals that a) explore ways for graduate students in STEM master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers, or b) support research on the graduate education system and outcomes of systemic interventions and policies.

IGE projects are intended to generate the knowledge required for the customization, implementation, and broader adoption of potentially transformative approaches to graduate education. The program supports piloting, testing, and validating novel models or activities and examining systemic innovations with high potential to enrich and extend the knowledge base on effective graduate education approaches.

The program addresses both workforce development, emphasizing broad participation, and institutional capacity-building needs in graduate education. Strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science organizations, and academic partners are encouraged.

With this solicitation, NSF invites proposals for two types of projects (described below):

Track 1: Career Preparation and Student Success Pilots: IGE supports projects that generate knowledge about new, potentially transformative improvements in graduate education and workforce development that prepare the next generation of scientists and engineers for the full range of possible STEM career paths to advance the nation's STEM enterprise.

Track 1 proposals focus on novel, pilot interventions in a single STEM program or at a single institution benefiting STEM students across multiple graduate programs. Track 1 will also support proposals examining the potential to extend a successful approach developed in one discipline or context to other disciplines or contexts. Examples of topics that Track 1 projects may address include, but are not limited to: student professional skill development; career preparation and vocational counseling; faculty training and faculty professional development; entrepreneurship; experiential and project-based learning; outreach and community

engagement; international experiences; virtual networks; pedagogical innovations related to generative AI and large language models; personalized learning; STEM identity and belonging; and mentoring. Projects should address how the proposed approach would serve a broad population of students from diverse backgrounds.

Track 2: Systemic Interventions and Policies: IGE Track 2 awards support research projects that are expected to generate knowledge about the graduate education system and outcomes of systemic intervention and policies. IGE Track 2 projects may be implemented at different scales: within a field of study across multiple institutions and programs; across multiple fields of study within a single institution; or across multiple institutions and fields of study. Specifically encouraged are proposals that address one of the following six areas:

1. Funding models and funding mechanisms
2. Graduate student mental health and wellbeing
3. Mentoring policies, procedures, and models
4. Graduate research environments and teams
5. Inclusive recruitment, admissions, retention, and completion strategies
6. Credentialing and degree milestones

Leadership teams (PI/Co-PIs) for both tracks are encouraged to include experts in education research, the learning sciences and/or evaluation, as appropriate, as well as in the principal science domain(s) as needed to design and implement a robust and appropriate research plan.

See the [full solicitation](#) for more information.

Award Information

IGE Track 1 Awards are expected to be up to three (3) years in duration with a total budget between \$300,000 and \$500,000.

IGE Track 2 Awards are expected to be up to five (5) years in duration with a total budget up to \$1,000,000.

Eligibility

VUMC may participate in two Innovations in Graduate Education proposals per competition. **Participation includes serving as a lead organization on a non-collaborative proposal or as a lead organization, non-lead organization, or subawardee on a collaborative proposal.**

An individual may serve as Lead Principal Investigator (PI) or Co-PI on only one proposal submitted to the IGE program per annual competition.

See the [full solicitation](#) for more information.

Internal Submission Instructions

Eligible faculty interested in being one of VUMC's nominees must submit the following (in a single PDF) to LSO@vanderbilt.edu by **5 p.m. on January 2, 2025.**

1. Project Description, including summary budget (2 page max)
2. Letter of support from department chair/center director
3. NIH Biosketch

The chosen nominee will submit a full proposal to the sponsor by the deadline of March 25, 2025.

Any questions about this opportunity or the LSO process may be directed to LSO@vanderbilt.edu.