



To: Distribution List

From: Faculty Research Development Office (FRDO)
Office of the Vice President for Research

Subject: Limited Competition: Innovations in Graduate Education (IGE), NSF 24-529

Date: January 26, 2024

The Innovations in Graduate Education (IGE) program is designed to encourage the 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 research-based 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. The program supports testing of novel models or activities 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 centers, and academic partners are encouraged.

The program now supports proposals in two tracks: **Track 1: Career Preparation & Student Success Pilots** and **Track 2: Systemic Interventions & Policies**. Under Track 1, the IGE program will continue to invite proposals to pilot, test, and validate innovative approaches to graduate education with an emphasis on career preparation and student success. 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 1 awards are expected to be \$300,000-\$500,000 and up to 3 years in duration.**

Track 2 is new with a primary goal to support research on how various systemic innovations in STEM graduate education impact graduate student outcomes (graduation rates, retention, employment, et al). 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 Track 2 proposals that address one of the following six areas: **1) Funding models and funding mechanisms** with a priority emphasis on studies on the effects of traineeships, fellowships, internships, and teaching and research assistantships on graduate student outcomes addressing differences by sex, race, ethnicity, and citizenship and student debt load; **2) Graduate student mental health and well-being** with a priority emphasis on projects that include research, data collection, and assessment of the state of graduate student mental health and wellbeing, factors contributing to and consequences of poor graduate student mental health, and the development, adaptation, and assessment of evidence-based strategies and policies to support emotional well-being and mental health; **3) Mentoring policies, procedures, and models** with a priority emphasis on studies of effects of graduate education and mentoring policies and procedures on degree completion, including differences by (i) sex, race and ethnicity, and citizenship; and (ii) student debt load; **4) Graduate research environments and teams** with a priority emphasis on proposals to study differences in graduate research environments (e.g., academic, industry, government, hybrid; place-based; team vs. independent; formal and informal social supports)

and associated outcomes or develop and assess new or adapted interventions, including approaches that improve mentoring relationships, develop conflict management skills, and promote healthy research teams; **5) Inclusive recruitment, admissions, retention, and completion strategies** including, but not limited to, studies of the impact of previously implemented and/or new innovations in policies or other interventions designed to broaden participation in STEM graduate education of students who are members of groups underrepresented in the STEM workforce; and **6) Credentialing and degree milestones** including, but not limited to, studies assessing the impact of systemic innovations in graduate degree milestones, micro-credentials, stackable credentials, and competency-based approaches on graduate education outcomes such as student recruitment, retention, completion, skills development, and employment readiness. **Track 2 awards are expected to be up to \$1 million and up to 5 years in duration.**

This is a limited competition. Each institution **may only participate in TWO (2) Innovations in Graduate Education Project proposals per competition.** *Participation includes serving as a lead organization on a non-collaborative proposal or as a lead organization, non-lead organization, or sub-awardee on a collaborative proposal.* If you are interested in submitting a proposal, please submit a statement of interest with a tentative project title and a brief description (200 words max) by **NOON on Friday, February 9, 2024** via UNM's [InfoReady Review portal](#). Based on the number of SOIs received, the Limited Competitions Team may announce a call for pre-proposals. No late submissions will be considered. Full proposals are due to NSF on **April 22, 2024**. For complete details, go to: https://www.nsf.gov/publications/pub_summ.jsp?WT.z_pims_id=505473&ods_key=nsf24529

Should you have any questions, please feel free to contact us at limited@unm.edu.

If you are affiliated with HSC, please contact HSC Limited Competition at HSC-LimitedComps@salud.unm.edu for more information.