



NSF Graduate Student Mentoring Plans

Resources for Principal Investigators

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Agenda & Logistics

- New NSF mentoring guidelines (effective 5/20/24)
 - Graduate Student Mentoring Plans
 - Individual Development Plans (IDPs)
- BU resources to support grad students & postdocs
- Q&A

Webinar Logistics

- Submit any Qs using the Q&A feature
- Recording & slides will be emailed to registrants after the event

Mentoring Plans – Update to NSF 24-1

- **Chapter II.D.2.i(I), Mentoring Plan**, has been expanded to address the revision to Section 7008(a) of the America COMPETES Act of 2022 (42 U.S.C. § 1862o(a)) requiring a mentoring plan for postdoctoral researchers or graduate students supported on the project. This page limitation for the Mentoring Plan remains one page.

Applies to all NSF proposals submitted on/after May 20, 2024



Mentoring Plans – NSF 24-1

- Submitted as component of proposal;
- No more than one page;
- Must describe mentoring to be provided to all postdoctoral scholars or graduate students supported by project;
- Separate plans not required for postdoctoral scholars or graduate students; plan may specify how different components will be enacted for the two types of researchers.

Examples include, but are not limited to, careers, proposal preparation, publications, presentations, teaching, mentoring, collaborating in diverse teams, and responsible professional practices.



Template Mentoring Plan



Download the template:
*BU Proposal Library >
Template Documents*

- **Orientation**
- Formal Interaction w/ Mentors
- **Career Counseling & Professional Skill Development**
- Publications & Presentations
- **Experience with Grant Proposal Preparation**
- **Teaching & Mentoring Skills**
- Collaboration & Professionalism
- **Training in the Responsible Conduct of Research**

For each of these areas, what BU-wide resources can augment your own group/laboratory support?

Orientation

- For graduate students:
 - School/college wide orientations
 - Program level sessions
- For postdocs:
 - Monthly, virtual postdoc [orientation hosted by PDPA](#)
- Orientation is ideal time for introduction of IDP

Career & Professional Skill Development

- For graduate students:
 - [PhD Progression](#), a digital badge micro-credentialing platform
 - NSF IGE-funded program (PIs: Hokanson, Goldman)
 - Badges in 7 Core Capacities: Career Development, Discipline Specific Knowledge, Research Skills, Management & Leadership, Self-Awareness, Communications Skills, Teaching Skills
 - Dissertation writing [groups, institutes, retreats](#)
 - [Summer internships](#) & [professional development grants](#)
 - [Center for Career Development](#)
 - [BU Libraries](#)
 - [Inclusive STEM Teaching Project](#) and [Center for Teaching and Learning](#) workshops

Career & Professional Skill Development

- For postdocs:
 - [Postdoc Academy](#), comprehensive online program built on National Postdoc Association core competencies
 - National collaboration b/w BU, MSU, UW – Madison, Northwestern
 - Asynchronous MOOCs via edX: *Succeeding as a Postdoc* and *Building Skills for a Successful Career*
 - In-person & virtual workshops
 - Grant-writing & career exploration workshops
 - Skill building workshops
 - In-person consultations
 - Professional development [travel awards](#)

Experience w/ Grant Proposal Preparation

- For graduate students & postdocs:
 - [PDPA programming](#)
 - E.g., mechanism-specific panels (F31, F32)
 - [Office of Research programming](#)
 - E.g., early career funding, meet the funder events
 - [Proposal Library](#)
 - Examples of successful grant submissions (F31, F32, K99)

Teaching & Mentoring Skills

- For graduate students & postdocs:
 - [Inclusive STEM Teaching Project](#)
 - NSF DUE-funded project
 - Online edX course (6 week, asynchronous) designed to teach & refine skills in inclusive instruction
 - [Center for Teaching & Learning](#)
 - Graduate Assistants Program/ Graduate Student Blog
 - Learning Communities on Inclusive Teaching

Training in RCR

- For Master's graduate students:
 - RCR-specific online CITI training
- For doctoral students & postdocs:
 - RCR-specific online CITI training; PLUS
 - 1 credit, non-tuition bearing course (ENG EK 800)
 - 10-week (50-minute/week) in-person course
 - Fulfills new NSF as well as NIH requirements

Individual Development Plans – Update to NSF 24-1

- **Chapter VII.B.7, Individual Development Plans for Postdoctoral Scholars or Graduate Students**, implements Section 10313 (42 U.S.C. § 18993) of the CHIPS and Science Act of 2022 requirement for postdoctoral scholars or graduate students who receive substantial NSF support must have an Individual Development Plan which is required to be updated annually.



Individual Development Plans – NSF 24-1

= 1 person-month per year, in form of stipend &/or tuition

- Each postdoctoral scholar and graduate student receiving substantial support from an NSF award must have an Individual Development Plan;
- Must be updated annually;
- Certification by PI required in annual and final annual reports (PAPPG VII.D.1.b(iv)).

IDPs map the educational goals, career exploration, and professional development of the individual.

IDPs

- For graduate students & postdocs:
 - PDPA IDP Workshops offered in fall (Sept) and spring (Jan) semesters
 - [PDPA IDP Template](#)
 - [MyIDP](#) (STEM)
 - [ImaginePhD](#) (Social Sciences/Humanities)
 - [ChemIDP](#), other discipline-specific
- Should be updated annually, can be in conjunction with annual review process:
 - [BU Postdoc Policy](#): *Mentors must provide an annual review to each postdoctoral scholar, either as part of the University's process for staff or in cadence with the annual cycle of the funding source that pays for their appointment*

Thank you!

Questions?



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Additional Resources

Full NSF [PAPPG](#) for further details

[Recording](#) of 4/23/24 CGS/NSF Webinar

Upcoming CGS Webinar of Interest (6/18/24, 2-3p ET):

[*How NSF's New Mentoring Requirements Can Improve Your Research Agenda*](#)