

National Science Foundation— Postdoctoral Researcher Mentoring Plan

One postdoctoral researcher will be (partially) funded on this project. The postdoctoral researcher's development will be enhanced through a program of structured mentoring activities. The goal of the mentoring program will be to provide the skills, knowledge and experience to prepare the postdoctoral researcher to excel in his/her career path. Specific elements in the mentoring plan will include:

- **Orientation and goal setting:** At the beginning of the postdoctoral appointment, the PIs will work with the postdoctoral researcher to develop an individual development plan (IDP) that articulates goals and steps to achieving career plans. Every quarter, together with the postdoctoral researcher, the PIs will evaluate progress towards their goals and let them set their own plan in the future semesters. This plan provides the leverage to help closely with the proposed plans while still allowing independence in their research. The PIs will meet with the postdoctoral researcher weekly in a one-on-one meeting.
- **Career counseling:** will be provided in part by the PIs. The PIs will assist postdocs in expanding their networks by introducing them to researchers in complementary fields. Postdoctoral researchers at Duke University also have access to individual career counseling appointments, career development workshops, and preparing an individual development plan, organized by the [Office of Postdoctoral Services](#).
- **Networking with researchers and organizational skills:** There is a vibrant research community in areas spanning from systems to security to cryptography in the Research Triangle Park (RTP) area where Duke University and other top-tier universities such as University of North Carolina, Chapel Hill, and North Carolina State University are located. The postdoctoral researcher will have opportunities to co-organize workshops at RTP in the intersection of these research areas.
- **Experience with grant proposals:** The PIs will provide opportunities to collaborate on research proposals to fund their own research project. Postdocs will have opportunities to learn best practices in proposal preparation, including identification of key research questions, definition of objectives, description of approach and rationale, and construction of a work plan, timeline, and budget. At Duke, the postdoc will also have opportunities to write Duke-Internal pilot research grant proposals to programs such as [Bass connections](#) and Code+.
- **Publications and Presentations** are expected to result from the work supported by the grant. The PIs will provide feedback on presentations to help the postdoc hone their presentation skills.
- **Teaching and Mentoring Skills** will be developed in the context of regular meetings within their research groups during which students and postdocs describe their work to colleagues and assist each other with solutions to challenging research problems, often resulting in cross-fertilization of ideas. The PIs will provide the postdoc with an opportunity to present lecture(s) in class and provide feedback on the content and approach.
- **Success of the Mentoring Plan** will be assessed by tracking the postdoctoral researcher's progress toward his/her research and career goals.