



## **NSF Postdoc Mentoring Plan Requirement for Proposals (NSF 09-1)**

The revised National Science Foundation NSF Proposal and Award Policies and Procedures Guide (PAPPG) is <u>effective for proposals received on or after January 5, 2009</u>. The revised PAPPG includes some notable changes; NSF included a **Summary of Significant Changes** with the Grant Proposal Guide.

http://www.nsf.gov/pubs/policydocs/pappguide/nsf09\_1/gpg\_sigchanges.jsp

One of the most significant changes to the PAPPG is implementation of the mentoring provisions of the America COMPETES Act for proposals that include support for postdoctoral fellows. Proposals without a separate section will be returned without review.

The revised NSF instructions state that:

Each proposal that requests funding to support postdoctoral researchers must include, as a separate section within the 15-page Project Description, a description of the mentoring activities that will be provided for such individuals. Examples of mentoring activities include, but are not limited to: career counseling; training in preparation of grant proposals, publications and presentations; guidance on ways to improve teaching and mentoring skills; guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas; and training in responsible professional practices. The proposed mentoring activities will be evaluated as part of the merit review process under the Foundation's broader impacts merit review criterion. Proposals that do not include a separate section on mentoring activities within the Project Description will be returned without review.

## ADVICE FOR DEVELOPING AN INDIVIDUALIZED MENTORING PLAN

A complete mentoring plan should include a discussion of both academic and professional development activities supported by the faculty mentor and tailored to his or her own laboratory and research program. The plan should (at a minimum) specifically address the following:

- initiation and training of new postdoctoral fellows to the local environment of the laboratory (e.g., safety training, review of protocols, discussion of available resources, expectation setting regarding development of technical and/or scientific expertise)
- how frequently and for what duration the faculty mentor will meet individually with each postdoctoral fellow (weekly/monthly) to discuss research findings, progress, and career direction
- opportunities for scientific exchange including laboratory/departmental/school journal clubs, colloquium series, meetings, and retreats for which postdoctoral fellows are invited or required to present their research with members of the local scientific community
- potential to obtain travel support to attend regional, national, and/or international scientific meetings or conferences to advance their scientific knowledge and provide professional networking opportunities
- *mentored* opportunities within the laboratory for postdoctoral fellows to become involved in grant writing, manuscript preparation and review, mentoring of students, etc.
- mechanism of performance evaluation (minimum yearly) and discussion of goal setting, training expectations, and future career direction





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## PROPOSED INFORMATION TO INCLUDE REGARDING <u>INSTITUTIONAL</u> ACTIVITIES AT HARVARD MEDICAL SCHOOL /DENTAL SCHOOL (per the HMS/HSDM Office for Postdoctoral Fellows)

offered to supplement (and not to be used in lieu of) the individualized mentoring plan by the P.I.

The Office for Postdoctoral Fellows at Harvard Medical School and School of Dental Medicine demonstrates the institution's commitment to the advanced training and mentoring of postdoctoral fellows. The office offers a wide array of programs and services specifically geared towards the professional and career development of postdoctoral fellows. Throughout the year, fellows have the opportunity to participate in a curriculum of workshops, panel discussions, and seminars designed to advance skills in lab management, grant writing and identifying funding opportunities, applying for academic and industry positions, interviewing and networking, scientific communication, and pedagogy.

In addition to an ongoing career development curriculum, postdoctoral fellows also benefit from access to one-on-one counseling sessions with a dedicated career development specialist to explore career options, seek feedback on resume and CV preparation, and discuss resources for skills enhancement. Postdoctoral fellows seeking careers beyond the academic track are encouraged to participate in a bi-weekly CV-to-Resume workshop and critique session offered by the Office for Postdoctoral Fellows staff. To supplement the professional development activities of the office, a lending library has been made available to postdoctoral fellows with over 65 titles ranging from writing an NIH proposal to career options in the biotech sector.

The institution's commitment begins immediately with a New Researcher Orientation (offered by the Office of Environmental Health and Safety) to include educational units on Chemical and physical hazards, Hazardous waste handling/storage, Fire Safety/Emergency Planning/Evacuation, and Bloodborne Pathogens and Biosafety. A New Postdoctoral Fellows Orientation, organized by the Office for Postdoctoral Fellows, is strongly encouraged to all fellows entering the HMS/HSDM community to introduce them to the research support offices at Harvard Medical School. The orientation is offered to educate postdoctoral fellows of the research administration functions at the school critical to their future success and the range of resources that exist to support their activities.

Additionally, postdoctoral fellows are required to actively participate in ethics training at Harvard Medical and Dental Schools. The Responsible Conduct of Research is an annual program established in 1990 by the Division of Medical Ethics to provide education in the responsible conduct of research for postdoctoral research fellows. The four-session course aims to promote integrity in science by building skills with senior medical school faculty and administrators to critically address ethical issues that arise in the course of a research career. The course covers the following topics in a participatory workshop model: 1) Regulation and Misconduct, 2) Conflicts of Interest/Data Management, 3) Authorship/Peer Review/Publication Practices and 4) Mentoring/Trainee Responsibilities/Collaboration.

As postdoctoral fellows move on to new positions in academia and beyond, they are invited to participate in an exit survey to assess their training and professional development experience. This survey allows for honest feedback to the career development curriculum and is intended to gather data to allow the institution to further strength the overall training and mentoring environment for postdoctoral fellows. In addition, postdoctoral fellows are encouraged to join the Harvard Medical School Postdoc Networking Group on LinkedIn.com as a means to maintain an alumni connection to Harvard as well as provide for meaningful networking opportunities throughout their careers.