**Sample Postdoctoral Mentoring Plans from 4 Laboratories at UW**

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**SAMPLE #1**

**DIRECT MEETINGS WITH MENTOR:** The PI will meet with the postdoctoral fellow at least weekly to discuss research results. Career goals will be discussed at the first meeting and the postdoc will be told that discussion of career planning is welcome at all future meetings. The postdoc will be expected to produce first-author papers. The PI will provide feedback on manuscript drafts, resumes, and proposals. The PI and postdoc will complete MIT’s Postdoctoral Mentoring Tooklit (www.mit.edu/mitpostdocs/toolkit).

**LOCAL PRESENTATIONS AND NETWORKING:**

1. The postdoc will actively participate in meetings of the PI’s group and will make a formal presentation of his/her results and literature monthly.
2. The PI will encourage the postdoc to join the UW Postdoctoral Association so that he/she quickly becomes embedded in a peer community with similar concerns, and has the opportunity to give professional presentations to a broad audience.

**NATIONAL PRESENTATIONS AND NETWORKING:**

The PI will provide travel support for the postdoc to attend annual national meetings. All lab members will critique the postdoc’s presentation and materials.

**RESOURCES AND CAREER PREPARATION:**

**a.** The postdoc will be encouraged to access mentoring resources that the PI maintains at the laboratory’s website and in print copies maintained in the lab (At the Bench: A Laboratory Navigator, Women Don’t Ask, Ask For It, and the HHMI’s Making the Right Moves).

**b.** The postdoc will be encouraged to attend career seminars through the UW Office of Postdoctoral Affairs (www.grad.washington.edu/profdev/postdoc.shtml).

**c.** The postdoc will be encouraged to read online advice on salary negotiation and job applications (www.grad.washington.edu/profdev/job-seeking-skills)

**ETHICS TRAINING AND RESOURCES:**

1. The postdoc will be asked to view a video on “The Ethics of Scientific Writing” (http://media.sciencestudiesnetwork.org/video/Gary%20Christian%20BFGW.mov).
2. The postdoc will be informed that he/she can consult with dedicated staff at UW to resolve questions of authorship, of conflicts of interest, of interpersonal conflicts, of discrimination, or of harassment through the ITHS Research Ethics Consulting Service, the UW Ombudsman, and the University Complaint Investigation and Resolution Office (www.grad.washington.edu/profdeb/postdoc.shtml).
3. The postdoc will be informed of training through UW’s Biomedical Research Integrity program (http://depts.washington.edu/uwbri/)

**OPPORTUNITIES:** The postdoc will be offered the opportunity (but not required) to:

1. Develop grantsmanship skills by contributing text and figures to lab grant proposals and by applying for postdoctoral fellowship funding.
2. Develop teaching skills by lecturing during a class period and by developing course materials.
3. Develop mentoring skills by directing the research of graduate or undergraduate students.

In all cases, the PI will provide constructive feedback.

**ASSESSMENT:**

The postdoctoral fellow’s publications, awards, independent grant funding, and career trajectory will be tracked.

**SAMPLE #2**

**C.5.3 Postdoctoral Mentoring Plan**

We ask support for postdoctoral researchers. Here we provide a postdoctoral mentoring plan, which we believe is effective. Of the three postdocs who have worked with our surface science program and entered the job market, all three now hold faculty positions.

1) The postdoctoral research associates in the proposed research program will be required to attend the biomedical research ethics workshops at the University of Washington on the first occasion that they are offered after their initial appointment. Typically, this course is offered in the summer.

2) After a 3-month period of active guidance by the PI, the postdoctoral researcher will make two presentations at the research group meetings. The first meeting will explain and summarize the postdoctoral's prior research efforts, including graduate research or, if applicable, prior postdoctoral research. The second presentation will summarize the goals of the present research project and the progress the postdoctoral researcher has made toward fulfilling the goals of that project. Subsequent to this period, the postdoctoral fellow will formally present his/her progress in a structured presentation at regular group meetings, typically twice a year.

3) In addition to formal group meetings, the postdoctoral fellow will meet weekly with the PI, to evaluate his/her progress and to receive guidance; these meetings are not as structured as a group meetings presentation. In addition, the co-PI's meet every two weeks with all members of the group that pursue projects related to the present proposal. The post-doctoral fellow will present his/her progress and receive guidance by both PI's as well as the group of researchers at large (other graduate students and post-doctoral fellows).

4) After the afore-mentioned three month period, the postdoctoral researcher will undertake day-to-day guidance to the experimental programs of junior graduate students and under graduate research assistants.

5) Every year, the postdoctoral researchers will be required to author a poster presentation for a national or international scientific meeting. The postdoctoral fellow will be strongly encouraged to apply for travel grants and to write the research and career goal descriptions required for such travel grant applications.

6) The postdoctoral researchers will be required to write first drafts of manuscripts derived from their research projects. They will also be responsible for making editorial changes in response to reviewer critiques.

7) The postdoctoral researcher will be regularly asked to contribute critiques for manuscripts that the PI will be reviewing as referee. The final review will be the responsibility of the PI, who will discuss and share final comments with the postdoctoral researcher to familiarize him/her with critiques of the scientific literature as well as the process of preparing a manuscript for publication.

8) In order to familiarize them with the process of preparing research proposals, postdoctoral researchers will be strongly encouraged to read and critique research proposals prepared by the PI that are related to the postdoctoral's research project.

**SAMPLE #3**

**Postdoctoral Researcher Mentoring Plan**

The University of Washington has a number of programs to facilitate postdoctoral researcher mentoring. These include a UW Postdoctoral Association and an Office of Postdoctoral Affairs (OPA). The OPA provides services to both postdoctoral scholars and their faculty supervisors and works to enhance the learning and productivity of UW postdocs. Particular services and programs that will be tapped for the mentoring program include workshops on the "Responsible Conduct of Research" (RCoR) and a series of "Biomedical Research Integrity" (BRI) workshops offered by the UW Department of Bioethics and Humanities. The BRI program was specifically designed to meet PHS requirements for instruction in the Responsible Conduct of Research in National Research Service Award Institutional Training Grants, but is also open to NSF-supported fellows. The program annually covers the following topics: a) responsible authorship, b) data acquisition and ownership, c) peer review, d) conflict of interest, and e) research misconduct.

The following specific plan for the mentoring of post-doctoral research associates has been adopted.

* Postdoctoral research associates in the proposed program will be urged to join the UW Postdoctoral Association and ***required*** to attend the biomedical research ethics workshops (RCoR & BRI) at the University of Washington on the first occasion that they are offered after their initial appointment.
* After a 3-month period of active guidance by the P.I., postdoctoral researchers will be encouraged to design or re-design their own research projects. During the initial 3-month period, the postdoctoral researcher will make two presentations at the weekly Research Group Meetings - one giving perspectives and results from the postdoctoral's prior research efforts; the second detailing progress to date toward the aims given in this proposal.
* After the 3-month period mentioned above, postdoctoral researchers will be encouraged to provide day-to-day experimental guidance to junior graduate students and undergraduate research assistants in the laboratory.
* Every year, postdoctoral research associates will be required to author a poster presentation for a local or national meeting of a scientific society. In the case of national and international meetings, the postdoctoral researcher will be encouraged to apply for a travel grant and write the research and career goal descriptions required for the consideration of such an application.
* Authorship: Postdoctoral researchers will, in all cases be responsible for writing the first drafts of research communications derived primarily from their data. They will also be active participants in the editorial changes associated with responses to reviewer comments.

**Sample Plan #4:**

This Postdoctoral Researcher Mentoring Plan has been prepared by the University of Washington. The Plan establishes guidelines for work to be performed by a Postdoctoral Researcher in support of the NSF Project proposed by the University of Washington (UW). The Postdoctoral Researcher assigned to the project, will work in the PI’s laboratory and will conduct research on synthesizing and characterizing various materials described in this proposal. The Mentoring will consist of the following activities:

* Orientation will include in-depth conversations involving the Postdoctoral Researcher and the PIs. These conversations will include discussions of professional objectives of the Postdoctoral Researcher, responsibilities of the Postdoctoral Fellow, and an introduction of the Postdoctoral Researcher to the science, infrastructure, and personnel (undergraduates, graduates, staff, postdoctoral fellows, faculty, and collaborators) involved in this project and related research. The Postdoctoral Researcher will be required to complete an online Ethics Training and Certification Module that is required of all personnel associated with the proposed project. The Postdoctoral Researcher will be required to complete University-mandated orientation and periodic re-certification courses in Laboratory Safety and Chemical Management, Asbestos Safety, Workforce Conduct, etc. The Postdoctoral Researcher will be introduced to the Research Group website, chemical inventory system, and weekly Group Meeting format. A discussion of mentoring of high school, undergraduate, and graduate students will be held including the procedures for acceptance of researchers from these categories into the Research Group. Note that Postdoctoral Researchers and Graduate Students as well as the Faculty Participants review applications and participate in interviews of high school students and undergraduate students seeking to participate in research experiences in the Group. In addition to the above, new employee orientation is provided by the UW Human Resources Office. An orientation regarding the function of the UW Chemistry and Chemical Engineering Offices and various department facilities and staff will be provided by the PIs and by department staff.
* Career Counseling will be directed at providing the Postdoctoral Researcher with the skills, knowledge, and experience needed to excel in his/her chosen career path. Inaddition to guidance provided by the PIs, the Postdoctoral Researcher will be strongly encouraged to discuss career options with researchers and managers at the University of Washington, and with former students and colleagues of the PIs and with research collaborators particularly those in industry and Federal laboratories. Specific activities, such as research collaborations and presentations at National Meetings of relevant professional societies, where the Postdoctoral Researcher can enhance his skills and knowledge base will be discussed.
* Experience with Preparation of Grant Proposals and Management of Research Projects will be gained by direct involvement of the Postdoctoral Researcher in proposals prepared by the University of Washington. The Postdoctoral Researcher will have an opportunity to learn best practices in proposal preparation including identification of key research questions, definition of objectives, consideration of broader impacts, consideration of what constitutes transformative research, consideration of workforce issues including diversity, description of approach and rationale, and construction of a work plan, timeline, and budget. The University of Washington provides a faculty grants management training class that the postdoctoral associates are encouraged to attend.
* Publications and Presentations are expected to result from the work supported by the grant. The PIs will work with the Postdoctoral Researcher to assure that the PD Researcher achieves optimum training and benefit from these important activities.
* Teaching and Mentoring Skills will be developed in the context of regular (weekly) research group meetings during which graduate students and postdoctoral researchers describe their work to colleagues within the group and assist each other with solutions to challenging research problems, often resulting in cross fertilization of ideas. Several other research groups often participate in the meetings of the PIs’ groups. In addition to discussion of research and laboratory conduct (e.g., safety, collaborations, etc.), Group Meetings feature literature reviews and presentations/discussions related to career development. Teaching and Mentoring Skills will also be developed through co-advisement, supervision, and mentoring of high school, undergraduate, and graduate students. Discussion of the importance of workforce diversity and of broader impact of research will be pursued to broaden the perspective of the Postdoctoral Researcher.
* Instruction in Professional Practices will be provided on a regular basis in the context of the research work and will include fundamentals of the scientific method, laboratory safety, and other standards of professional practice. In addition, the Postdoctoral Researcher will be encouraged to affiliate with one or more professional societies in his/her chosen field and to broaden interdisciplinary skills and knowledge.
* Technology Transfer activities will include regular contact with researchers at UW and UW Tech Transfer staff. The Postdoctoral Researcher will be given an opportunity to become familiar with the university-industry relationship including applicable confidentiality (Non-Disclosure Agreements) requirements and preparation of invention disclosure applications and material transfer applications. Staff from the UW Tech Transfer Office periodically addresses the Research Group.
* Success of the Mentoring Plan will be assessed by monitoring the personal progress of the Postdoctoral Researcher through a tracking of the Postdoctoral Researcher's progress toward his/her career goals after finishing the postdoctoral program.