

Columbia University Postdoctoral Officer Mentoring Program: Guidelines for Faculty Mentors and Postdoctoral Research Officers

The Need for Postdoctoral Officer Mentoring

Postdocs have the primary responsibility for their careers. Faculty mentors are responsible for guiding and monitoring the training of postdocs. In that role, faculty mentors should make clear the goals, objectives, and expectations of the training program and the responsibilities of the postdoc. They should regularly and frequently communicate with the postdoc, provide regular and timely assessments of the postdoc's performance, and provide career advice and job-placement assistance.

Basic Obligations of the Postdoctoral Research Officer

- Acknowledge that you have the primary responsibility for the development of your career.
- Explicitly discuss with your mentor the scientific goals and timelines of your project and understand how these contribute to the overall goals of the laboratory. Also discuss with your mentor his/her expectations regarding your time in the laboratory/on your research project. Your postdoctorate is a professional opportunity in which significant effort and results are the norm at Columbia University.
- Actively develop your research skills, including rigorous experimental design, careful analysis of data, effective problem solving strategies and critical interpretation of the scientific literature. Assume progressive responsibility and management of your research project as it matures.
- Be aware of and utilize available University resources; become familiar with all pertinent university policies; attend Human Resources and the Office of Postdoctoral Affairs' (OPdA) orientation sessions.
- Conform to ethical standards in research including compliance with all institutional and federal guidelines as they relate to responsible conduct in research, privacy and human subjects research, animal care and use, laboratory safety, and use of radioisotopes.
- Conscientiously discharge your research responsibilities.
- Comply with good laboratory practices.
 - Maintain laboratory notebooks and/or other records of research activity in accordance with laboratory and disciplinary standards.

- Attend all required training classes (human subjects, vertebrate animal care, radiation safety, etc.) and obtain required certifications, training for use of chemicals, infectious agents, workplace safety, etc.
- Have explicit discussions with your mentor regarding your research results; accept feedback and criticism from your mentor with an open mind.
- Promptly disclose information to your mentor with respect to your possession of and/or intent to distribute materials, reagents, software, copyrightable, and potentially patentable /discoverable items from your research; understand applicable University policies which govern those materials.
- Comply with all applicable University policies and the terms and conditions of the sponsoring agency (as applicable).
- Ask open ended questions of your mentor – How am I doing? How could I improve my research project? Seek regular feedback on your performance.
- Remember that productivity is based on collaboration and cooperation.
- Show respect for and work collegially with your coworkers, support staff and all other individuals with whom you interact.
- Actively seek opportunities outside the laboratory (i.e., professional development seminars and workshops) to develop the full set of professional skills necessary to be successful in your chosen career.
- Discuss your career plans and job search strategies with your mentor.
- At the end of your appointment, and in accordance with institutional policy, leave behind all original notebooks, computerized files, tangible research materials, etc. so that other individuals can carry on related research. Work with your mentor to submit the research results for publication in a timely manner.

Basic Obligations of the Mentor

1. The Appointment Process

- Use the template appointment letter created by OPdA (see OPdA's website) to ensure that you include all information required. Experience has shown that vague language and missing information can cause problems after the postdoc arrives on campus.

- Ensure that the postdoc meets with the appropriate departmental administrator to sign all appropriate documents and is informed about health benefits, “time off” and sick leave, is provided with copies of OPdA’s checklists (<URL>), etc.
- The postdoc should be encouraged to attend Human Resources’ Welcome and OPdA’s Orientation sessions as these sessions will ensure the postdoc is effectively informed of all aspects of postdoc life at the University.

2. Orientation to the Postdoc Experience, to Columbia, to the Disciplinary Profession, to the Lab, and to the Mentor/Mentee relationship:

- Explicitly discuss the postdoc’s expectations of the mentor/mentee relationship.
 - Discuss the source of funding for the postdoc’s compensation. Is the postdoc expected to obtain an outside fellowship or be paid by the PI’s externally sponsored awards or designated University funds?
 - Explicitly discuss with the postdoc the scientific and educational expectations of the research grant, fellowship, training grant, etc., and ask if s/he has questions.
 - Explicitly discuss the postdoc’s expectations of the mentor/mentee relationship.
 - Inform the postdoc of available resources in your laboratory and at Columbia that could facilitate the start-up process.
- Alert your postdoc to available support from the Office of Postdoctoral Affairs (contact Beth H. Israel, Associate Vice President, at 212/854-0462; 212/305-4073; or via email at postdocaffairs@columbia.edu).
- Encourage the postdoc to let you know right away should s/he ever feel treated unfairly or if s/he encounters any problems, and carefully follow up on any such concerns. Let OPdA know if we can be of any assistance to you.
- Encourage the postdoc to become an active mentor to graduate and undergraduate students where appropriate.

3. Building Trust

- Ask your postdoc about his/her goals and respect and accept them where these are reasonable; if not reasonable, attempt to ‘steer’ the postdoc to more realistic goals.
- Encourage feedback from the postdoc regarding his/her need for guidance; be direct and honest if a problem arises.

- Watch for depression, fatigue, isolation, pessimism, and difficulty concentrating.
- Remember the goal: To help the postdoc gain the appropriate experience in order to advance his/her scientific abilities and to pursue a satisfying professional career.

4. Education/Training

- Explicitly instruct the postdoc in rigorous experimental design, careful analysis of data, effective problem-solving strategies, and critical interpretation of the scientific literature.
- Inform the postdoc of available resources and be willing to refer him/her to someone else for help/information.
- Discuss a timeline for progress in the research project and provide a training environment that is suited to the individual needs of the postdoc.
- Encourage the postdoc to seek additional mentors in the various areas in which s/he will require guidance.
- Involve the postdoc in establishing successful collaborations.
- Promote ethical standards for conducting research including compliance with all institutional and federal regulations as they relate to responsible conduct in research, privacy and human subjects research, animal care and use, laboratory safety, and use of radio isotopes, including intellectual property of the postdoc. (For more information about intellectual property see the University's Office of Science and Technology Venture's website at <<http://www.stv.columbia.edu/>>.) Define expectations for the conduct of research in the laboratory.
- Discuss the ground rules of collaboration; clarify collaborative issues such as ownership and sharing of data and laboratory notebooks, attribution of contributions to the research.
- Discuss conflict of interest, grant applications, and ethical implications of the postdoc's research.
- Ensure that the postdoc receives and understands the appropriate/applicable professional, federal, and university regulations and guidelines pertinent to their research.
- Involve the postdoc in scientific discussions within lab meetings and/or on an individual basis.

- Provide opportunities for the postdoc to participate in the writing and reviewing of papers and grant applications. Provide constructive feedback on oral and written communication skills.
- Encourage the postdoc to take the time to attend meetings, seminars and other career development activities, maintaining an appropriate balance between these activities and the development of the postdoc's research career, unless you feel that the involvement could compromise the development of the postdoc's research career. Be prepared to openly discuss the pros and cons of such activities.
- Establish and communicate rules of publication including: a) criteria for authorship; b) criteria for establishing first author; c) criteria for order of middle and last authors; d) who decides on the content of the manuscript; e) who drafts the manuscript and f) who is responsible for polishing it prior to publication.
- Ensure that the research performed by a postdoc is submitted for publication in a timely manner and that s/he receives appropriate credit for the work performed. Acknowledge the postdoc's contribution to the development of any intellectual property.
- Inform the postdoc of skills and procedures required for successful lab management; encourage participation in related seminars.
- Encourage creativity and independence.

5. Evaluation

- Conduct periodic reviews with the postdoctoral officer at least annually.
 - Assess the postdoc's progress to date, strengths, areas needing improvement, and potential for a research career in the discipline.
 - The review may include a set of mutually agreed-upon activities/expectations for the following year.
 - All written evaluations – should they be requested by either party – shall be signed by the faculty mentor and the postdoc and kept on file in the postdoc's personnel file.
- Maintain open communication with the postdoc regarding career goals and options. Include a periodic review of mutual expectations.
- Offer frank and candid assessment of the postdoc's potential to become an independent investigator.

6. Career preparation

- Encourage postdocs to complete and continually update their Independent Development Plan (IDP). Review their IDP with them semi-annually.
- Support/encourage the postdoc to present their work at scientific meetings. Help the postdoc engage in networking; introduce him/her to colleagues at meetings or by phone/email.
- Play an active role in the postdoc's job search (provide advice on application letters, CVs, interviews, presentations, negotiations, etc.).
- Offer opportunities for the postdoc to develop supervisory skills through training students and other research staff.
- Encourage the postdoc to participate in career development seminars and activities sponsored by OPdA, New York Academy of Sciences, professional societies, etc.
- Encourage the postdoc to actively seek opportunities for professional experience and advancement (e.g., volunteer on committees, help organize scientific meetings/retreats).
- Maintain a positive attitude toward a diverse range of career opportunities for the postdoc; learn about nonacademic opportunities and provide appropriate advice for postdocs interested in nontraditional career paths.

Links to Postdoc Mentoring Resources:

Resources internal to Columbia University:

Office of Postdoctoral Affairs

Beth H. Israel, Associate Vice President

Natalie A. Cox, Assistant Director

116 Low Memorial Library; 601 W 168th Street; Suite 44

(t) 212/854-0462; 212/305-4073; (f) 212/854-1267

Email: postdocaffairs@columbia.edu

<http://www.columbia.edu/cu/postdocs>

Ombuds Office:

Marsha Wagner

600 Schermerhorn Extension; 101 Bard Hall

(t) 212/854-1234; 212/304-7026; (f) 212/854-6046;

Email: ombuds@columbia.edu

<http://www.columbia.edu/cu/ombuds>

Office of Research Compliance and Training

Naomi J. Schrag, Associate Vice President

102 Low Memorial Library

(t) 212/851-1997

Email: ns2333@columbia.edu

<http://www.columbia.edu/research/compliance>

Office of Science and Technology Ventures

80 Claremont Avenue, 4th Floor; 630 West 168th Street, P.H. 1535 East

(t) 212/854-8444; 212/305-5198

(f) 212/854-8463; 212/305-5070

E-mail: stvinfo@columbia.edu

<http://www.stv.columbia.edu/>

Office of Equal Opportunity and Affirmative Action

Susan Rieger

103 Low Memorial Library

(t) 854-5511

Email: sr534@columbia.edu

<http://www.columbia.edu/cu/vpaa/eoaa/>

Office of Disability Services

8th floor, Lerner Hall; 101 Bard Hall

(t) 212/854-2388

(f) 212/854-3448

Email: disability@columbia.edu

<http://www.health.columbia.edu/docs/services/ods/index.html>

Research Administration

James Kemp, Associate Vice President
254 Engineering Terrace; 722 West 168th Street, 4th Fl
(t) 212/854-6851; 212/305-4191
Email: Morningside: MS-Grants-Office@columbia.edu
CUMC: grants-office@columbia.edu
<http://www.columbia.edu/cu/researchadministration/index.html>

Human Resources

Benefits – <http://www.hr.columbia.edu/hr/benefits/page-section.html>
Annual review forms - <http://www.hr.columbia.edu/dat/misc-pages/forms/index.html> (see Managing Performance)
Back-up Care - <http://www.workoptionsgroup.com/>

Faculty Handbook: <<http://www.columbia.edu/cu/vpaa/fhb/main.html>>

Resources External to Columbia:

National Postdoctoral Association
<<http://www.nationalpostdoc.org>>

Postdoc Jobs
<<http://www.post-docs.com>>

Writing Letters of Recommendation for Academic Jobs
<http://www.mla.org/resources/jil/job_counseling/bulletin_ade/bulletin_125044>

Individual Development Plan for Postdocs
<<http://opa.faseb.org/pdf/idp.pdf>>

Postdoc Annual Review Form
<<http://opa.faseb.org/pdf/SampleAnnualReview.pdf>>

AAMC Compact Between Postdoctoral Appointees and their Mentors –
<<http://www.aamc.org/research/postdoccompact/>>

Enhancing the Postdoctoral Experience for Scientists and Engineers: A Guide for Postdoctoral Scholars, Advisers, Institutions, Funding Organizations, and Disciplinary Societies – National Academy of Sciences, National Academy of Engineering, Institute of Medicine, National Academy Press. Committee on Science, Engineering, and Public Policy, 2000 <<http://www.nap.edu/catalog/9831.html#toc>>

How to Mentor Graduate Students
<<http://www.grad.washington.edu/mentoring/GradFacultyMentor.pdf>>

Adviser, Teacher, Role Model, Friend – On Being a Mentor to Students in Science and Engineering (National Academy Press, 1997).

<<http://www.nap.edu/readingroom/books/mentor/>>.

How to Obtain the Mentoring you Need – A Graduate Student Guide -

<<http://www.grad.washington.edu/mentoring/GradStudentMentor.pdf>>

Paglis, Green and Bauer; “Does Adviser Mentoring Add Value?”, Research in Higher Education, 47 (No. 6, June 2006)

<<http://www.springerlink.com/content/1383072723614542/fulltext.pdf>>

“Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty”, Chapter 5: Mentoring and Being Mentored. Burroughs Welcome Fund/Howard Hughes Medical Institute, 2004

<<http://www.hhmi.org/resources/labmanagement/moves.html>

Smaglik, Paul – “Postdocs, Mentor Thyselves”, *Nature*, 2005, 434:415.

<http://www.nature.com/naturejobs/2005/050317/pdf/nj7031-415a.pdf>