

Guidelines for Mentored Training at the NIEHS

Adapted from <http://sourcebook.od.nih.gov/ethic-conduct/sdpolicy-mentoring.htm> and https://www.training.nih.gov/assets/Postdoc_Handbook_2012.pdf

I. Introduction and Rationale

The [mentoring of junior scientists](#) (students, postbaccalaureate fellows, and post-doctoral fellows) is one of the most important obligations of senior scientists at the NIEHS. The mentor is expected to assess the progress of the junior scientist, make suggestions for improvement on a regular basis, and provide advice and counsel regarding career development decisions.

Mentoring is a practitioner-apprentice relationship, and by its nature, requires interaction between them. While the nature of mentoring relationships can vary widely, the NIH Scientific Directors consider the [following guidelines](#) as the *minimal requirements* for effective mentoring of trainees:

II. Guidelines for Trainees at the NIEHS

The trainee and mentor must work together to develop a relationship that fosters freedom of inquiry, critical evaluations, and personal and professional integrity. Trainees must take the initiative to build a strong relationship based on mutual trust and respect. They must strive for the excellence that will merit the intensive involvement of their mentor in their future success.

A. Goals:

- Teaching an approach and methodology for scientific investigation
- Developing a sense of what questions are technically able to be answered and have important answers
- Transmitting a history of ideas in a discipline including identification of major contributions and contributors
- Encouraging the development of the ability to evaluate critically the quality of one's own and others' research
- Providing an ethical framework for the conduct of research and dealing with collaborations
- Enhancing the development of oral and written communication skills
- Facilitating entrance into the research community in the discipline.

B. Responsibilities of Trainees:

Trainees have certain responsibilities that will enhance their mentoring and training experiences while at the NIEHS. The NIH Scientific Directors consider the following guidelines as the minimal requirements for trainees to meet:

1. Trainees must have a commitment to the work of the laboratory/branch and Institute/Center and to the achievement of their research goals. They are expected to develop a sense of responsibility for the use of the public resources that are made available to them.

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2. Trainees must recognize that much of contemporary science involves team effort and collaborative interactions that require them to conduct themselves in a mature, professional, and civil manner in all interactions with other NIH staff. Trainees must recognize that they work within a laboratory environment and be good citizens by contributing to the maintenance of shared resources and a clean and safe work area.
3. Trainees should initiate meetings with their supervisor at least every two weeks to discuss research findings and at least yearly to discuss career goals. They have a responsibility to develop their yearly training goals and career goals in these discussions and will need to communicate these goals clearly to their mentor so that together they can tailor education and training objectives to meet those goals.
4. Trainees are encouraged to identify one or more mentors in addition to their immediate supervisor. Such mentors will facilitate the professional networking that is key to advancement of their career goals.
5. Trainees must be aware of the legal and ethical aspects and responsibilities that underlie their research. They need to develop an understanding of the behaviors that are considered ethical and unethical within the scientific community (see item 7). They must exercise the highest integrity in collecting, analyzing, and presenting research data.
6. Trainees should make their satisfactions, dissatisfactions, and needs known to their mentor clearly and often. They should feel comfortable about discussing concerns with their lab/branch chief, training director or scientific director, and/or the [NIH ombudsman](#) when necessary.
7. Trainees must take the NIH Staff Orientation and Information Program and ensure that they take the required courses described therein. Topics covered include essential items to start work; NIH history; staff rights, responsibilities and programs; staff development opportunities; research ground rules; and quality of life issues.

C. Responsibilities of Mentors:

1. The mentor must be readily available to the trainee to answer questions about research and discuss results and future research directions; this requirement involves meeting in person with the trainee at least every 2 weeks.
2. The mentor must work closely with the trainee in the preparation of oral presentations of the research and the preparation of papers and abstracts describing the work.
3. The mentor should advise the trainee about the best forum in which to present the research work. When attending meetings together, the mentor should strive to introduce the trainee to important contributors to the research field.
4. On an annual basis, the mentor must provide the trainee with an oral and written assessment of the trainee's progress, strengths, and areas requiring improvement. This meeting shall include a discussion of the trainee's professional goals and the

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mentor's feedback on their appropriateness, the likely length of stay in the laboratory, and planning and preparation for career decisions after the NIH training.

The mentor shall assist the trainee in identifying and securing an appropriate second mentor, an advisor [*not necessarily scientific*] for all aspects of career preparation. Both the primary and secondary mentors should be willing to provide career development support regardless of the trainee's chosen career path. If neither mentor feels equipped to provide advice on the trainee's chosen career path, the mentors should assist the trainee in identifying additional mentors to serve in this role.

III. Annual Review of Trainees Prior to Renewal

A periodic review of a fellow's progress in the laboratory is helpful for both the trainee and the mentor to ensure that training goals will be achieved. An annual report is also used to justify and support the request by the preceptor to renew, modify or terminate the appointment of a Fellow.

The "NIEHS Individual Development Plan Update" [available on-line] is the official report form used by mentors and the Office of the Scientific Director to document trainee status.

Briefly, the document is completed each year prior to a Fellow's anniversary date and includes information regarding:

1. Research: Past year's achievements & future goals
2. Career: Long-term career plans; past year's training & future goals
3. Mentorship:
 - a. development of relationship with second mentor;
 - b. efforts to mentor someone else
4. Expectations:
 - a. Productivity
 - b. Effort
 - c. Creativity
 - d. Reliability
 - e. Cooperation/team effort within lab
 - f. List of research presentations, including attendance at scientific meetings

IV. Progress Assessment and Penalties

NIH Intramural postdoctoral trainees are initially appointed for a one-year term, with the expectation of two or more years of training. Additional years are generally awarded one at a time, dependent up availability of funds and adequate progress by the trainee.

Appropriate progress in carrying out the project is a responsibility of the trainee, in keeping with the advice of the mentor and other advisors. Inadequate performance in carrying out any or all of the parameters above can, in extreme cases, be judged to be grounds for dismissal from the training program. Mentors who find that a trainee is underperforming to such a degree shall bring this matter to the attention of their Lab or Branch Chief, and –if

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need be—to the attention of the Scientific Director or the Training Director. Every effort shall be made to devise a corrective plan to improve the trainee’s performance. In a case where dismissal is to be the course of action, then a trainee shall be given twelve months’ advance notice of the dismissal. This notice shall be in the form of a written letter, signed and acknowledged by both the mentor and the trainee.

Exceptions to the one-year rule consist of scientific misconduct and other types of research malfeasance. In these cases dismissal may be carried out promptly. Review and appeals processes in place for NIH employees apply to trainees as well. Full details regarding this policy may be found on p. 28 of the [2012 NIH Postdoc Handbook](#).