The Research Mentor: Roles and Guidelines

The Research Mentor is an important key to a successful trainee experience. The Research Mentor must take an active role by working closely with the trainee to define clearly not only an appropriate research project, but also a strong career development plan, providing guidance, training and support, and serving as a role model for the trainee. The mentor must be genuinely interested in the goals of the trainee's program, namely to: 1) encourage students and post-docs to aspire to an academic career in their area of specific research interest, and 2) provide trainees with a realistic understanding of the academic basic, population or translational science research environment. The following description of the mentor's role and guidelines for serving in that role are offered to provide assistance:

What does a superior Research Mentor do?

- The mentor should be an accomplished investigator with a sustained record of competitive research funding and an active research program.

- The mentor must ensure frequent interaction with the trainee. The mentor should schedule regular meetings with the trainee to make sure that he/she understands all expectations and to monitor the progress toward his/her educational, research and career development goals.

- The mentor needs to be able to speak frankly with the trainee to address problems and obstacles to progress early and to work together with the trainee to put solutions into place earlier rather than later in the process.

- The mentor should assist the trainee in developing the research project and a career development plan that is consistent with the trainee's goals.

- The mentor should prepare for the trainee's arrival by clarifying the trainee's research and role in the group with other personnel in the laboratory.

- The mentor must provide a range of appropriate experiences for the trainee: laboratory research group meetings, departmental seminars, journal clubs, relevant didactic courses, etc.

- The mentor should constantly encourage and assist the trainee to write abstracts and give oral or poster presentations at regional, national, and international scientific meetings.

- The mentor should encourage the trainee to prepare manuscripts reporting the results of his/her research and submit the manuscripts to peer-reviewed journals for publication.

- The mentor should create opportunities to introduce the trainee to thought leaders and researchers at other institutions who have similar interests.

- The mentor should provide assessment and constructive feedback, and document the trainee's research progress and performance.

- Consequently, the research mentor must work in an environment with sufficient resources to offer a trainee an enriching experience throughout his/her fellowship.

Evaluation of Mentor by the Trainee

Intellectual Growth and Development
- Encourages my imagination and creativity
- Encourages my inventiveness including the identification of new research topics, discovery of new techniques
- Helps me develop my capacity for logical reasoning and my ability to draw logical inferences from observation and experimental data
- Helps me to be critical and objective concerning my own results and ideas

Research
- Shows me how to do original research
- Takes steps to improve my ability to conceive explanatory hypotheses and design critical tests of such hypotheses
- Provides constructive feedback on my experimental designs
- Provides thoughtful advice on my research

Professional Career Development
- Provides counsel for important professional decisions
- Is instrumental in building my professional networks
- Provides guidance on professional ethics
- Promotes collegial relationships with professional community
- Helps me to envision a career plan
- Provides guidance on finding a job
- Provides guidance on a full range of career options

Academic Guidance
- Provides sound advice on my academic goals relative to my career plans
- Discusses pitfalls in my academic growth
- Encourages and creates opportunities for me to become familiar with researchers from other institutions

Skill Development
- Takes steps to develop my planning and organization, communication, teaching and team leadership skills
- Provides instruction and constructive feedback on presentation skills
- Provides instruction and constructive feedback on manuscript and grant-writing skills

Personal Communication
- Listens carefully to my concerns
- Keeps in touch on my progress
- Takes into account gender, ethnic, and cultural issues
- Takes a respectful attitude toward my interests and work
- Provides feedback in a timely fashion