### The "Right" Postdoc Mentor

Robert J. Dooling
Department of Psychology &
Neuroscience and Cognitive Science Program
University of Maryland
dooling@psyc.umd.edu

### What should a new trainee look for in identifying a Postdoc mentor?

- o Active publication in high quality journals
- Extramural funding (in science) and likelihood of continuation
- National recognition and other indications of status
- o Rank, tenure status, proximity to retirement
- Prior training record (time to complete degree, number of graduates, placement)
- Lab organization
- Work ethic

### What are the expectations a trainee should have for his/her Postdoc mentor?

- o Financial aid for stipend & tuition
- o Costs of research
- o Travel to meetings
- o Place to do work
- o Intellectual support
- o Help in finding postdoc and/or job
- Mentor should be available for discussions and meetings

### **Types of Postdoc Mentors and Models**

- Collaborator type
  - Professionally youthful, Ass't Prof
  - Focus on productivity
- Hands-off type
  - mid-level of career
  - Less demanding in terms of productivity
- Senior scientist advisor
  - many other commitments
  - High-quality attention but hit and miss
- Didactic model
  - "listen to me"
- Apprentice model"follow me"
- o Collegial model
  - "be my junior colleague"
- Friendship model
  - "be my friend"

# What expectations should a Postdoc mentor have for her/his trainee?

- $\,\circ\,$  Active participation in lab activities
- o Work ethic
- o Focus on getting degree in a reasonable time
- Actively work toward professional skills & independence as an investigator
- Communicate honestly with mentor regarding research progress
- o Foster collegial relationship with mentor
- Meet department, graduate school, research deadlines

## What things should a Postdoc mentor discuss with a trainee?

- Authorship
- o Ownership of data (and patents)
- Expectations for when postdoc will be around
- Participation in other research projects and authorship on those
- Mentors availability
- Potential for funding for stipends, research, travel, etc.

### **Final Thoughts**

#### A Good Mentor is:

- Advisor
- o Critic
- Advocate
- Instructor
- o Role model
- o Scientific 'parent'

#### **Useful References:**

- Macrina, F. L. (2000) Scientific Integrity: An Introductory Text with Case Studies, ASM Press, Washington, DC
- NAS (1995) *On Being a Scientist*, 2<sup>nd</sup> Edition, National Academy Press, Washington, DC
- NAS (1997) Adviser, Teacher, Role Model, Friend, National Academy Press, Washington, DC

#### **Mentoring Topics**

- o Characteristics of a successful mentortrainee relationship.
- What should a new trainee look for in identifying a potential mentor?
- o Trainee expectations for the mentor.
- o Mentor expectations for trainee.
- Things mentor should discuss with trainee.
- Types of mentors.

### What are the characteristics of a successful mentor-trainee relationship?

- Demonstrate style/methodology of doing research
- Develop and foster an analytical approach to doing research.
- Discuss concepts of any sub-discipline, and evolution of those concepts over time.
- Explore and evaluate literature of the discipline and important broader knowledge
- o Discuss ethical basis of scientific research.

## What are the characteristics of a successful mentor-trainee relationship, Cont'd

- Demonstrate how to consider, analyze and evaluate the work and conclusions of colleagues.
- Transmit by example and discussion, the skills required for successful scientific writing.
- Evaluate and critique research and teaching.
- Facilitate socialization and access to research community in the discipline.
- Strive for a relationship characterized by mutual trust.
- Foster interpersonal skills needed to become a scientist.