

# Mentoring

Arthur G. Palmer, *Ph.D.*  
*Associate Dean for Graduate Affairs*

*(Thanks to Richard Robinson for some lecture material)*

Also see: *Scientific Integrity*, Macrina, Chapter 3



# What is and do I need a Mentor

A mentor is an experienced and trusted advisor.

The graduate thesis advisor and postdoctoral director are “natural” mentors in the sciences (in the best circumstances).

Universities (and other organizations) are institutionalizing mentoring (for example of junior faculty), but “outside” mentors still can be valuable.

Mentoring has acquired a somewhat mythic status as essential for success, but many scientists are successful without overt formalized mentoring relationships.

# Some Characteristics of Mentoring

- It might be a lifelong relationship, which evolves and changes over time, or a series of relationships reflecting changing career/personal needs.
- Mentoring is a two-way relationship but, at least initially, is inherently asymmetric because the mentor is more experienced.
- Mentoring encompasses more than simply teaching a skill set, but also transmits the norms/socialization of a discipline.
- Each of you are likely to be both a trainee and a mentor yourself at some point in your life.

# Two Aspects of Good Mentoring

**The mentoring relationship is structured for maximum benefit of the mentee, which may require good communication by the mentee**

Pitfall: Mentors naturally tend to treat mentees in the same way the mentors were treated (or wanted to be treated) at similar career stages).

Example: “I figured out that you really are interested in my project, but you are expecting me to come to talk to you, rather than the reverse”

**The mentor is focused on the success of the mentee, rather than using the relationship to further the mentor’s own ends**

Pitfall: Particularly during graduate/postdoc training, the mentor’s and mentee’s goals can be parallel, but still divergent (grant renewal vs. graduation)

Key point: One’s mentees are a measure of success as much or more than papers (training the next generation).



# Who were/are my mentors?

## 1. Graduate thesis advisor

Important role in graduate school and selecting postdoctoral position, less so now

Still influences my “way of thinking” about science after 25 years.

## 2. Senior graduate student (from another laboratory)

Continuing mentorship role on career choices (starting with choice of thesis advisor!)

## 3. Postdoctoral advisor

Critique of scientific goals

Mentorship on career choices

## 4. Critical, but less structured or short term, relationships



# How to Find “Outside” Mentors

1. Learn which scientists in your discipline or prospective discipline have good reputations as mentors (ie have successful proteges) .
2. Take advantage of opportunities to meet senior figures in your discipline (attend graduate student luncheons with speakers, “meet the speaker” sessions at conferences, etc.).
3. Start small. Ask an individual to read a proposal you are preparing. Invite him/her to lunch at a conference to talk about science or careers (theirs and yours)—ask your thesis/postdoc advisor to make the introduction if you are uncomfortable doing this yourself.
4. Respect people and their time constraints. Do not ask them to read a proposal the day before the deadline. Do not try to meet every senior scientist at every conference. Do not grab the microphone to ask questions after every talk at a conference.



# Aspects of Mentoring

*from NIH Intramural Training Guide*

- Training in scientific investigation
- Training in communication
- Training in personal interactions
- Career planning
- Training in scientific responsibility



# Compact Between Biomedical Graduate Students and Their Research Advisors

AAMC Group on Graduate Research, Education, and Training (*GREAT*)

*December 2008*

*<https://www.aamc.org/initiatives/research/gradcompact/>*

Spells out responsibilities of **both** trainee and mentor



# Excerpts from Compact

## ***Trainee***

**I acknowledge that I have the primary responsibility for the successful completion of my degree.** I will be committed to my graduate education and will demonstrate this by my efforts in the classroom and the research laboratory.

## ***Mentor***

**I will be committed to the life-long mentoring of the graduate student.** I will be committed to the education and training of the graduate student.

## ***Trainee***

**I will meet regularly with my research advisor and provide him/her with updates on the progress and results of my activities and experiments.**

## ***Mentor***

**I will be committed to meeting one-on-one with the student on a regular basis.**

## ***Trainee***

**I will work with my research advisor to develop a thesis/dissertation project.** This will include establishing a timeline for each phase of my work

## ***Mentor***

**I will be committed to the research project of the graduate student.** I will help to plan and direct the graduate student's project, set reasonable and attainable goals, and a timeline.



# Excerpts from Compact (continued)

## *Trainee*

I will be knowledgeable of the policies and requirements of my graduate program, graduate school, and institution.

## *Mentor*

I will be knowledgeable of, and guide the graduate student through, the requirements and deadlines of his/her graduate program as well as those of the institution.

## *Trainee*

I will be a good lab citizen.

## *Mentor*

I will not require the graduate student to perform tasks that are unrelated to his/her training program and professional development.

## *Trainee*

I acknowledge that it is primarily my responsibility to develop my career following the completion of my doctoral degree. I will seek guidance from my research advisor, career counseling services, thesis/dissertation committee, other mentors.

## *Mentor*

I will provide career advice and assist in finding a position for the graduate student following is/her graduation.



# Some Mentoring Issues

## Topics from the course that can involve mentoring issues

- Publication and authorship
- Conflict of interest
- Ethical dilemmas
- Human and animal research issues

## Mentor specific issues

- Choosing a laboratory and mentor
- Interpersonal relations



# Case Studies

The textbook and handouts describe a number of (slightly) exaggerated situations (but I know of actual situations).

## 1. Handouts:

Case study 1: Picking research laboratory

Case study 2: Managing mentor-mentee conflicts

## 2. Textbook:

Case 3.2: Communicating personal issues with advisor

Case 3.4: Setting work hours in laboratory

Case 3.7: Parallel projects and confirmation of results



# When things go wrong

*Columbia University Grievance Policy:*  
<http://gsas.columbia.edu/content/grievance-policy>

## Complaints Concerning Non-Academic Matters

- Violations of Equal Educational Opportunity and University Policies on Discrimination, Discriminatory Harassment, or Sexual Harassment
- Sexual Misconduct
- Misconduct, Dishonesty or Fraud in Research



# When things go wrong (continued)

## Complaints Concerning Academic Matters

- Violation or misapplication of departmental academic rules and regulations so as to be unfair or in conflict with Graduate School or University policy.
- Unfair or inappropriate decisions concerning financial aid or teaching or research fellow assignments.
- Excessive or unreasonable demands on a TA or RA made by a faculty member or department.
- Violation of Graduate School or University rules and regulations or misapplication of Graduate School or University policy.



## Complaints Concerning Academic Matters (cont'd)

- Disrupting, refusing to comply with or preventing another's free expression or dissemination of ideas in the performance of his or her responsibilities as a student or faculty member (e.g. conducting research, teaching).
- Other interpersonal conflicts that negatively and unfairly affect the student's academic environment and progress.
- Academic dishonesty among students, including cheating, plagiarism and improper acknowledgement of collaboration.
- Retaliation against a student arising from bringing a complaint or concern to an office, program, or department of the GSAS.



# When things go wrong

## *Columbia University Grievance Policy*

The University has established alternative policies and procedures for the following types of grievances:

- Discrimination and sexual harassment may be dealt with through the Office of Equal Opportunity and Affirmative Action, the Ombuds Office, the dean of the school of the accused if the accused is a student or the Department of Security if the situation may involve criminal activity.
- Sexual misconduct by a student may be dealt with through the Office for Disciplinary Procedure for Sexual Assault.
- Professional misconduct or fraud in research on the part of a faculty member should be brought to the attention of the dean of the school according to the procedure outlined in Appendix C of the *Faculty Handbook*.
- Formal grievances filed against administrators, faculty members, departments and programs, and students of other schools must be reported to the dean of the school in question.
- Academic assessment of students resides with the departmental faculty. Thus, in cases of grievances relating to academic evaluation brought by a student against a faculty member, department, or program, the grievance procedure is limited to assuring that the assessment was made impartially and according to procedures applicable to all students.





# When things go wrong

## *Columbia University Grievance Procedure*

- Informal resolution (laboratory, department or program)
- Mediation (Associate Dean for Graduate Affairs)
- Formal grievance (Dean of GSAS)

