

## Mentorship: Inspiration and Example

### Some Points for Discussion

Health Sciences March 11, 2009

Mentor: “The Odyssey” by Homer. Odysseus sailed off to fight the Trojan war, left his son with his friend Mentor.

Mentoring: Academic, Career, Personal Growth – extends well beyond graduate school through student’s career.

According to NIH, mentors are:

- Advisors , who have career experience and are willing to share their knowledge,
- Supporters , who provide emotional and moral encouragement,
- Tutors, who give specific feedback on one's performance,
- Supervisors , who monitor their students' academic and professional progress,
- Trainers , who teach students about professional responsibility,
- Sponsors, who are sources of information about opportunities and assist students in obtaining them, and
- Role models, who exhibit the qualities and ethical values that academics should possess  
(The National Institutes of Health,1999; Zelditch, 2001).

**Selection of Students:** interests which mesh with your own; credentials and communication skills; demonstrated commitment to studies; funding capacity; current number of students being supervised; student’s time to previous degree; recommendations; student’s personal style (call student)

**Settling In to the Program:** Define research Interests; clarify goals and expectations early on; create a mutually agreeable timeline of activities long-term and short-term (term by term planning); establish communication links: how do you want the student to contact you and how often – when do you specifically need to hear from the student (problems with TAs ok, difficulties on course exams etc). Do you expect pubs to be joint? Do you expect the student to shape the project or would you have a hand in this? Do you expect the student to do TAs? Is there a specific term when the student might receive an RAship from you?

**Meetings:** Arrange regular meetings. Student preparation crucial; clarify expectations with students (i) bring an agenda of topics for discussion (circulate a day prior) (ii) bring notes from previous discussions (iii) remind you about upcoming deadlines (iv) bring details on what has been accomplished since the last meeting (v) if you're not there (eg delayed by a meeting) leave a note on your door saying where the student might find you (vi) after the meeting prepare a summary – this would be brief and could be in point form outlining key points, with the subject header clearly defined so you can easily maintain a record.

**Conflicts:** when conflicts arise, discuss face-to-face; make the effort to walk to the student's workspace yourself; communicate clearly (prepare beforehand) and work with positive tones rather than negative; state the problem and offer suggestions on how you might work collaboratively to a solution.

**Research:** Helping the student put the work in context (in the broader picture) is very useful as students tend to get bogged down in their specific quests and lose sight of the bigger picture. Helping the student make connections with other work is also an important role. Guide the student in his/her specific avenues of research. Students will have "dry" spots and seek to avoid you in these periods; maintain active communication and talk about papers, other related topics to give them enthusiasm for their research. It is helpful to regularly schedule time for discussion of papers: this emphasizes to the student the importance of keeping on top of the literature. Use opportunities, as they arise, to discuss professional situations, ethics etc. Introduce your students to the professional world of your discipline, to invited speakers. Find time to review draft presentations. Build confidence. When at the writing stage, let the student know beforehand about how long you need the draft before being able to respond – students often have higher expectations on turn-around time which may lead to conflicts with deadlines for submission. How do you want revisions prepared; would you like the marked up version, or just the new version? Do you have team meetings, and what is expected at these?

**PhD Students and Teaching:** Work to identify teaching opportunities – perhaps in your classroom. Arrange to observe the student on multiple occasions.

**Career Development:** Nominate students for awards. Be on the look-out for positions and help the student through the application process, including mock interviews, preparation of the CV, etc.

**Interdisciplinary Supervision:** On Statistical Collaborative Work (attached) ideas there may be helpful; also see “A short guide to supervising interdisciplinary PhDs” attached.

- Much time and effort required: and, as supervisor, this will be a learning process for you: you will be learning from other disciplines
- Choose the members of the supervisory team carefully
- Make opportunities for the team to read papers in the various fields involved; the student should coordinate this
- Understand that the student cannot be expert in all disciplines involved; but should certainly be expert in at least one; need to come to terms with the balance between breadth and depth
- There will need to be strategies put in place to develop a committed supervisory team: decide beforehand on communication methods, on frequency of meetings and schedule these beforehand.
- Facilitate networking for the student in the disciplines involved

Graduate Student Survival Guides, Guides on Effective Presentations, On Effective Teaching: Provide these. I have several grad student guides: e.g.

How to be a good graduate student: <http://www.cs.indiana.edu/how.2b/how.2b.html>

Grad Study in the computing and math sc <http://www.cs.umd.edu/users/oleary/>