

Mentoring Graduate Students

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Transformations in Graduate School

Obtain Knowledge  Create Knowledge
Student  Colleague

Development of scholars and educators

Role of Mentor: Facilitator and Catalyst

Challenge and Fun: Each student and their path is unique

Unique Relationship: Graduate students choose us (honor)



The First (Recruiting) Meeting: start of mentoring

Before they choose to work with you

- ◆ Get to know the student: why do they want to be a graduate student, what are their career goals, why do they want to work with you...
- ◆ Discuss the available project(s) in detail, especially the broader picture (why is the project important, what will success look like, what will be the impact of the project(s))...
- ◆ What background is needed, what will the student learn
- ◆ Provide resources for additional information
- ◆ Encourage them to visit your lab, meet with your group, attend group meetings (if time permits)
- ◆ Your expectations, funding situation

Success: The student makes an informed decision to join your research group for the right reasons



The Early Stage: The Making of a Scholar

Intellectually Challenging - Personally Supporting

- ◆ Challenge the student in a variety of ways
- ◆ Discuss different problems with them
- ◆ Engage them to think about problems of other group members
- ◆ Encourage them to build a network of fellow graduate students with whom they discuss all aspects of professional life
- ◆ Make sure you are sensitive to their style but gradually help them develop other styles

Success: The student takes ownership of their problem. It is no longer a problem that you suggested but it is their problem



Designing a Specific Program

Encourage students to always have a grad school and career plan and discuss this often with them

- ◆ Treat each student as an individual. Try to learn what concerns them, what motivates them. Any special circumstances (e.g. family responsibility). Know when to support and when to pull back.
- ◆ At any time, they should have a career goal. It is OK if it changes
- ◆ Their graduate program (courses, additional responsibilities etc.) must be tailored for their career goal
- ◆ Make sure they understand your and the Department's requirements
- ◆ Always have time lines and milestones (can be fluid and should evolve)
- ◆ Meet with students individually and frequently (set time once a week in my case, available at other times if needed)

Success: Students must know that you are available when needed and that you are treating them as an individual



Research Group and Group Social Activities

To model faculty/mentor role for students and to help students develop a network of colleagues for life

- ◆ To this day, my fellow grad students are part of my professional network and personal friends.
- ◆ It is important for the students to see you in action as an advisor and mentor
- ◆ Students should be encouraged to contribute to each other's projects
- ◆ Forum for students to develop communication skills (discussions and presentations)
- ◆ Social activities help establish a group identity and help new members break into the group (in my group, it is the Superbowl party, summer BBQ and graduation parties)

Success: Students know that they belong to your (unique) research group, they learn how to mentor students and they have a shared experience with every member of your group (past, present and future).



Mid-Stage: Networks, Skills

Research can be a lonely experience

- ◆ In the trenches, it is very important that students feel that their project is important and others care about it

I arrange for my students to spend some time elsewhere and conduct part of their research there (National lab, international colleagues, another institution or another research group)

- ◆ This helps students realize that their problem is important
- ◆ Helps them develop important professional contacts
- ◆ Helps them find additional mentors, resources and expertise
- ◆ Help them develop needed skills for successful career by making them do specific guided tasks (paper and proposal writing, teaching, supervising students...)
- ◆ Provide constructive, supportive and timely feedback
- ◆ Mistakes are great educational moments, share your mistakes

Success: Students develop a strong professional network and have multiple mentors. They develop the needed skill set for a successful professional career



Mentor as Cheerleader

Shamelessly promote your students

- ◆ Take them to meetings, introduce them to your colleagues, tell everybody about the fantastic work they are doing
- ◆ Consider smaller focused meetings (e.g. Gordon Conferences) in addition to large Society meetings
- ◆ Give due credit to them in your presentations
- ◆ Nominate them for awards, fellowships...
- ◆ Encourage them to get involved with professional societies

Success: Students feel you are proud of their work and will work hard to get it recognized.



Final Stage: Transition to a Colleague

Help them finish and get a job

- ◆ Transition: The student is teaching you about their project/sub-field
 - ➔ They are ready to graduate
- ◆ Detailed discussion about the possible opportunities and job hunting strategies
- ◆ Open up your address book, make contacts on behalf of the students
- ◆ Help them (or find resources to help them) with their resume, personal statements and interview skills
- ◆ Write strong, specific letters for them

Success: Student gets a job and is on the path to being your professional colleague



A Lifelong Relationship

You will always be a mentor to them

- ◆ Continue to stay in touch, meet at meetings and be there at times of transitions (new job)
- ◆ Help them with their new career (share expertise, review proposals...)
- ◆ Introduce your current students to your alumni

Success: Alumni know that they always belong to your group

Enjoy



Being a mentor is the most satisfying part of being a faculty member



Thanks for
your attention