Mentoring Graduate Students

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Transformations in Graduate School

Obtain Knowledge \rightarrow Create Knowledge
Student \rightarrow 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