

Teaching, Advising & Service

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Balancing Act

- Variety is a great part of the job...
- ...But attending to different “sub-jobs” is a balancing act
- Pre-tenure: Know your school’s expectations (research, teaching, service) for tenure.
 - Try to choose a school with a balance that matches what you want to be doing...
 - ...and with resources to help you get there
 - Use school’s tenure expectations as part of how you decide to allocate your efforts

Teaching

- Unbelievably different from putting together powerpoint slides & giving a conference talk
- Hard, but hugely rewarding when it works
- For your sake:
 - Be excited about what you teach, or at least about the students learning it
 - Amortize: Teach a class at least three times if possible
 - Teach a grad class once per year & use it to gauge and recruit grad students
- For students' sake:
 - Include interactivity: “powerpoint = boring”
 - Stay organized: Not just in lectures, but in keeping homework in synch with labs, answering email, ...
 - Minimize mystery
 - Fair, uniform rules

Advising

- My focus here: Grad & undergrad research advising
- Fun!
 - collaborate with energetic, inquisitive, smart, interesting people
 - See them become independent, opinionated researchers
- Advice
 - Give them enough of your time
 - Keep your door open
 - Get them to view lots of people as info sources, not just you
 - Start out with concrete steps & goals: milestones, conference deadlines...
 - We all have lowpoints in research. Motivate them and help keep the long-term view
 - Get them to conferences early (workshop paper => trip)
 - Stay positive. If you don't enjoy the work, why should they?
 - Ask about their career hopes early and often
 - Cultivate the full professional: writing, speaking, job advice...

Students → your research group

- Get them to apply to your program
 - If giving a seminar elsewhere, ask to also have an hour slot with the undergrads. Buy pizza & inform/recruit them.
 - Remind your colleagues elsewhere you're looking for good students; ask them to mention your school to good seniors
- Get them to your office
 - The students you already have can be your most effective publicists
 - Give a seminar/class to the first-years once a year before they pick advisers
 - Show your excitement for what you're doing
- Once they're there at your door
 - Choose students you enjoy talking to
 - Show your excitement for what you're doing
 - Give them what they need to excel: equipment, time, ...

Undergrads & Research

- A positive experience is more important than the volume of research results...
- Exploratory projects can get you reading papers & thinking about new areas
- Concrete system-building to demo a concept
- Give them plenty of contacts to work with (grad students)
- Meet (at least) weekly
- Full citizenship: Include them in group meetings, etc.

Pre-tenure Service...

Job One: Get tenure.

- The biggest service you can do for yourself, your department, and all of us is:
 - Get tenure and still be in research 10 years from now
- So, avoid pressure to do short-term service
 - If it will take time & prevent you from being around long-term
- But....
 - many departments do expect at least a bit of pre-tenure service
 - And often best way to improve something in your dept, is to do it yourself

Win-Win Service

- Service that helps you too. Examples:
 - Graduate admissions committee. Help ensure that some incoming students will be a good match for your research
 - Seminar organizer. Sometimes a great way to make contact with main researchers in your field and get to talk with them
 - Generals/qualifying exam: If you arrive in a (eg) very theory-oriented department and the qualifying process doesn't suit your students, then being a part of the committee
- University committees: nice way to work with people in many departments

Big finish

- Teaching:
 - Interactivity is hard, but worth it
 - Grad classes are small, fun, let you talk with 1st years
- Advising:
 - Be the kind of adviser you would have wanted
 - Time spent on it pays off in many ways
- Service:
 - First three years: Just say no unless there's an issue (eg grad admissions) to address
 - Next three years: 1 piece of service to appease the tenure folks

