Keys to Becoming a Successful Faculty Member

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• Prior to Start: Ask for what you need to be successful
• Organization and Multitasking (life after grad school)
• Teaching
  – Interactions with TAs and Students (Patience & Empathy)
  – Developing Lecture/Labs/Homework/Exams
• Service
  – Be proactive – ask to serve on what interests you!
  – Be a good citizen – make yourself appreciated!
• Interactions with Colleagues and Staff
  – Find an informal mentor that suits your personality
  – Be respectful of staff as well as colleagues
• Research – the goal is to get tenure, so what is required?
  – mix of high/low risk projects
Research Requirements to Get Tenure

• Demonstrated ability to raise sufficient EM funds to sustain research program
• Demonstrated ability to mentor graduate students (e.g., coauthoring papers)
• Unique niche in research
• Significant body of work (peer-reviewed publications)
• Hit the home run – singular achievement
• Demonstrated impact of research
• Visibility (invited talks, discussion at conferences)
Advice about Grant Applications

- Search the web sites of agencies to look for overlap of programs with your research expertise/interest (find POCs)
- Pre-proposals a must
- Cover letter (introduce expertise + idea)
- 2 page CV
- Follow up 1 month later with phone call
- Possibly visit agencies/POCs to float ideas
- Full proposals (intro: motivation/goals; background: prior research in field, your expertise; proposed research; expected impact)
- Optimal if have preliminary results, but not always necessary
- Ask PM what a reasonable budget will be (grad students here cost >$60K, postdocs more like $85-100K, including overhead, benefits, tuition…)
- Interdisciplinary proposals – find the right home within the agency, construct the right team
Grant Administration

• Can spend 90 days in advance of start date, once have official word of funding
• Immediately advertise for postdocs
• Recruit grad students
• Get started as soon as possible
• Turn reports in on time
• Get spending projections so you do not go in the red
Running a Research Group

• At first, work side-by-side with students
• Later, senior students can help train junior students
• Be available! (Open door policy)
• Each student is different, must figure out how to motivate them
• All go through a learning curve, be patient!
• Give each student a project they can “own”, yet enough overlap with others in the group so they don’t feel isolated
• Hold weekly formal group meetings where students get practice presenting their research, a few times per year
• Hold weekly informal subgroup meetings where each student reports on previous week’s progress and plans for the next week
• Keep them writing, so they don’t leave it all for the end
• Output full-fledged researchers who can: define a problem, a solution strategy, execute the strategy, analyze the data, write a great first draft, give an excellent talk