

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