

# Advice for New Faculty in Statistics Departments

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## Think Long-Term

- ▶ Think in terms of building a long and fulfilling career
- ▶ Do things you enjoy. Figure out what you enjoy
- ▶ Learn to be a scholar: research, teaching, mentoring
- ▶ Build collaborations
- ▶ Contribute to the department and the profession
- ▶ Do things that will help you continue to do what you like
  - ▶ Finish papers
  - ▶ Submit grants
  - ▶ Give talks
  - ▶ Other positive activities for tenure . . .
- ▶ Be open (leave your door open at least a few hours/day)
  - ▶ Talk to colleagues
  - ▶ Talk to scientists from other disciplines
  - ▶ Attend seminars
  - ▶ Go to conferences, even if you are not invited or funded
  - ▶ Do not have to work with everyone, but good to talk/listen
  - ▶ In time this leads to more innovations and interesting work

## Important Skills

- ▶ Making good decisions. Examples:
  - ▶ Choice of research topics
  - ▶ Whether to resubmit paper to same journal
  - ▶ Whether to submit a grant with a particular collaborator
  - ▶ Whether to take on a service assignment
- ▶ Time management
  - ▶ Protect research time: no meetings/email 8-11 am, 4-5 pm
- ▶ Learn by example
  - ▶ Start with someone else's grant
  - ▶ Start with someone else's course notes
  - ▶ Start with someone else's annual faculty report, promotion and tenure dossier
  - ▶ Time efficient. Also, no manual has all of this information
- ▶ **Mentors are invaluable for much of the above**

## Mentoring (Don't Do Things Alone)

- ▶ You need to be able to regularly turn to people you trust
- ▶ Mentors may be junior, senior, or outside your department
- ▶ Different mentors for research, teaching, work-life balance
- ▶ Seek help – don't wait for people to ask you
- ▶ Identify good mentors: usually balanced/happy people, successful researchers, generous, and good teachers

## Research

- ▶ Work on topics that are interesting to you
- ▶ Learn from examples: papers in the journal, good writers
- ▶ Get comments from friends and colleagues
- ▶ Work on more than one subject area, but probably not many more
  - ▶ Reduces risk. Also helps to switch when you are stuck
  - ▶ Exposes you to more ways of thinking

## The Publication Process

- ▶ Good decision-making and a good attitude help
  - ▶ If referees don't understand your work, write more clearly!
  - ▶ If referees are wrong, politely clarify
  - ▶ You don't have to do everything a referee asks you to do  
Politely explain why you won't
  - ▶ If unsure, ask a mentor for help on how to respond
  - ▶ Revising a paper can be tedious. But virtually every revised paper is an improvement over the original
- ▶ Be polite when reviewing papers:
  - ▶ Provide constructive criticisms
  - ▶ Make clear recommendation

## Teaching

- ▶ If possible, use someone else's notes the first time
  - ▶ Do not make big changes – this is inefficient. Plus, you do not yet understand the material, the students, or how the course is organized (Be humble!)
  - ▶ Okay but not necessary to make changes the second time
- ▶ Spend time on teaching: important part of job and career
  - ▶ Offer to teach a class in your area of specialty
  - ▶ Teach at different levels: you can learn from all levels
  - ▶ Try not to take on too many new classes
- ▶ Teaching well can help your research: clarifies thinking, communication, new research ideas
- ▶ Teaching is like a gas: will expand to take over whatever space (time) you give it
  - ▶ Teaching should not encroach on protected research time
  - ▶ Law of diminishing returns: After a certain point, do not keep trying to improve slides, homework, etc.

## Grant Writing

- ▶ Most statistics departments require research funding for promotion and tenure
  - ▶ Also help fund students, travel, salary
  - ▶ Can provide a vision/plan for your own research
- ▶ Start with someone else's successful grant as an example
- ▶ Important: find programs well suited to your research
- ▶ Mentors can edit your grant, give ideas for where to submit
- ▶ Grant process can be frustrating. But persevere
  - ▶ I submitted many ( $\approx 12$ ) proposals that were not funded
  - ▶ I've been continuously funded ever since

## People Skills

- ▶ PhD students: can bring joy + productivity
  - ▶ Mentors also need mentors!  
Haran and Hunter (2016) "On academic mentoring" in *Amstat News* <https://magazine.amstat.org/blog/2016/09/01/on-academic-mentoring/>
- ▶ Dealing with difficult situations/difficult people
  - ▶ You have more power than you think you have – stand up for yourself (with advice from a mentor)
  - ▶ Have senior colleague act as a shield: "I am sorry but my department head advised me against this."
  - ▶ Do not burn bridges: be firm but polite
- ▶ Treat everyone with respect: faculty, staff, grads, undergrads
  - ▶ This is the right thing to do
  - ▶ Also good for career/happiness

## Communication Skills

Communicate information about yourself, e.g. problem you solved in a paper, new grant, your student got a nice job

- ▶ If you do not do this, who will? Tell people, put information on your CV/website (regularly update both)
- ▶ Invest time in writing, talks: huge impact on career

## Parting Thoughts

- ▶ Academic life can be great. Have fun!
  - ▶ Don't put off fun things: research, teaching, music, sports...
  - ▶ It will make tenure an even bigger deal (you "gave up" 6 years for this?!)
  - ▶ Patterns established the first 6 years often continue later
- ▶ For the most part, you are your own boss
  - ▶ Have high standards
  - ▶ Treat yourself with kindness and patience

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- ▶ A few useful ideas here: R. Hamming: Striving for Greatness in All You Do [http://www.mccurley.org/advice/hamming\\_advice.html](http://www.mccurley.org/advice/hamming_advice.html)