Language and Tools for Establishing Influence as an Early-Career Statistician

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Keywords: credibility, project management, professional development

Abstract:
While statisticians are formally taught methodological skills, tactful project management and establishing credibility early on are equally important to successfully contributing to a team. In some settings where traditional hierarchies drive authority, such as the medical profession, it may be particularly difficult as an early-career (female) statistician to establish credibility and manage projects with confidence. In order to establish expertise and command respect from the get-go, or to re-work the current dynamic on a project team, several subtle tactics may be used. Pulling from popular culture texts on the topic, including Sheryl Sandberg’s widely recognized Lean In, as well as resources from our own profession, I will highlight tips and tricks I’ve picked up in the first five years of my career as a statistician that have proven useful in being taken seriously by senior collaborators.

Tools for Establishing Influence

1. You will need to explain what you do - they probably don’t know
2. Use we instead of you - this helps establish that you are a collaborator and are invested in this project too
3. Don’t ask, tell - when I do xyz, I’m usually listed as the second author - have confidence, avoid upspeak
4. Meeting Tips
   (a) Offering to coordinate a meeting allows you to pick a mutual location
   (b) Don’t accept impromptu meetings unless absolutely necessary
   (c) Know when to bring another statistician with you
   (d) If you’re going to a meeting where you have to pitch an idea or get others on board, try to set up 1:1 meetings beforehand to gain support
5. Communication Tips
   (a) Know the audience you have, not the audience you want
(b) Repeat and approve - don’t outright reject collaborators ideas, acknowledge their contribution and suggest an alternative.

c) Follow your collaborator’s lead in terms of how you address them (Dr. Slover vs Jim)

(d) Silence is okay - sometimes when you explaining something it takes a collaborator some time to process what you said, give them a minute, don’t presume you were unclear and further explanation is needed.

6. How to Explain Results

(a) Speak the same language as your collaborator. Explain your results in a way they will understand.

(b) Summarize results at the top of a document. Provide additional details below.

(c) Do not send analyses immediately if there is no true deadline - this can establish unrealistic expectations for future work with this collaborator.

7. Instead of this... say...

(a) I’m just emailing to ask... I’m emailing to ask

(b) No problem... You’re welcome

(c) I feel like we should/ Maybe we could... We should do x because

(d) This project/analysis will be easy... This project/analysis will involve xyz and I am looking forward to working on it.

8. Don’t minimize yourself - you have gone through school, training, and have work experience (you are awesome) - using words like just and easy minimize you and your efforts.

Take Control of Your Career Path

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Keywords: career, path

Abstract: Careers in statistics can take many paths. Do you want to develop new statistical methods, do you want to become an expert at specific modeling strategies, or do you want to know about a breadth of topics? No path is wrong as long as it works for you. How do we decide what we want and how do we take control of getting where we want to be? Drawing on personal experience along with those of my mentors I will describe what I’ve learned while forging a career path that works for me. Specific topics to be discussed include: Should I agree to do something that isn’t related to statistics at all? Can I say no? I’m so far in over my head, now what? I really want to try X, Y, and Z, how can I get the opportunity? Leaning on others and bringing some along for the ride.
Where are you going?

Write down something you would like to achieve in the next year: an opportunity, a promotion, a publication, etc.

7 Points to Consider

1. Know your promotion requirements
   - Prioritize these requirements over more enjoyable roles or activities
   - Consider long term vs short term
   - Make sure to ask "how can I be promoted without a PhD" when interviewing

2. Find a great mentor
   - Schedule meetings with them
   - Make agenda of topics to cover
   - Stay in touch even when you leave institution

3. Be empowered
   - Be confident
   - Say 'No' when necessary, but consider why you are saying no:
     - Will saying 'Yes' open doors?
     - Will you be spread too thin?
   - Speak up when working on something you don’t like

4. Know your strengths
   - Also know your weaknesses
   - Know others strengths too

5. Step out of your comfort zone
   - You can learn from these new experiences (both what you do and don’t like to do)

6. Continuing education
   - Maintain a skillset that is desirable to the industry at large
   - Stay current in a particular subject matter

7. Celebrate your victories
   - Write down how you will celebrate your goals
Playing in Everyone’s Back Yard: Stories of Success, Lessons Learned, and Advice for Productive and Enjoyable Collaborations

Panel of Speakers:

Rebecca Hubbard, University of Pennsylvania

Megan Othus, Fred Hutchinson Cancer Research Institute

Layla Parast, RAND Corporation

Elizabeth Sugar, Johns Hopkins University

Keywords: collaboration, consulting, applied statistics, networking

Abstract: According to John Tukey, “The best thing about being a statistician is that you get to play in everyone’s back yard.” Collaborating with non-statisticians can be rewarding, and the opportunity to contribute across a range of scientific areas is one reason many statisticians choose this field. But, navigating collaborations effectively can be challenging. Many statisticians struggle to develop collaborations where they can participate as equal contributors to scientific inquiry (instead of just technicians with a p-value machine). Female statisticians may face additional hurdles establishing collaborative relationships. Panelists with extensive experience collaborating with non-statisticians in a range of applications areas (including cancer, ophthalmology, and health policy) will discuss strategies for developing and sustaining productive, enjoyable collaborations. Panelists include: Rebecca Hubbard, University of Pennsylvania Layla Parast, RAND Corporation Megan Othus, Fred Hutchinson Cancer Research Institute Elizabeth Sugar, Johns Hopkins University

Discussion

- Find people who you work well with, who respect you, and who you respect - you may get along well socially, but have very uncooperative work styles
- Utilize mentors to find good collaborators and avoid bad ones
- People often don’t ask why if you say 'No’ to a potential collaboration - if they do say 'I don’t have time because I’m overfunded' which should stop the discussion
- Leave when collaborators don’t work out unless there are strategies to remedy the relationship
- Find someone to take your place when exiting a collaboration - don’t introduce a 'problem' you don’t already have a solution to
- Learn your collaborator’s language - 1st author a non-statistical paper to become more familiar with the field
- Ask questions and show interest in your collaborator’s work
- Don’t be afraid to say "I don’t know"