The Professional Side of Grad School: Navigating Grad School and Getting a Job

(This content of this document is largely taken from a document on Purdue's philosophy department website written by Prof. Daniel Kelly, trimmed and slightly modified to be relevant for EAPS. We thank Prof. Kelly for creating these resources and sharing them publicly!)

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Disclaimer: What comes below is an opinionated take. You can and will get conflicting advice on many of the issues addressed. That’s fine; there is no single optimal overall strategy or tactical package or set of guidelines here. Solicit advice from people you trust, understand the reasoning behind the different recommendations, take on board and put together a game plan that best works for you. Most important is that you are thinking about this kind of thing, and that you are thinking about it early and often.

I. Welcome to graduate school!
   A. There is lots to do here, internal to the program and department, while you’re taking classes and moving through Purdue’s graduate student program
      1. Do well in classes, impress your professors with your academic acumen and work ethic and all-around brilliance, write good papers, and turn your work into conference or journal submissions!
      2. Get involved, go to talks, join and participate in reading groups, be part of the social and intellectual life of the department and larger intellectual and social community at the university
      3. Work hard! Pursue your interests with passion and vigor!
   B. Within the broader context of the discipline and profession
      1. Eventually you will have to choose a research specialty, and a dissertation topic, and a dissertation committee, and we’ll talk about those things more specifically below
      2. But even at the outset be casually thinking about and have an eye on the type of professional identity you’re putting together for yourself as you go – it will be important for many reasons, but especially as you get closer to and make a run at the job market
   C. Your discipline in EAPS (Geology and Geophysics, Environmental Science, Atmospheric Science, or Planetary Science) will and should take on a larger and more central place in your life and identity and sense of yourself
      1. This is great!
      2. So: do not think of graduate school as merely undergraduate+
         a. It is not just a slightly ramped up continuation of what you were doing before
         b. Graduate school is different in kind, not merely degree
c. The level jump will be slightly less drastic for those of you coming from MA programs, but the MA program PhD program transition is also non-trivial

3. More generally, be thinking about yourself as an adult, and as being a member of and an actor in an intellectual & professional community
   a. And so: conduct yourself accordingly
   b. For a nice, thought provoking take on some of the less obviously things packed into that ‘accordingly’ this thread on twitter isn’t a bad start
   c. Another list of wisdoms for graduate students

4. Be a good departmental citizen, an active participant in the intellectual life of the department and university and larger discipline
   a. This includes within the physical confines of the department and offices, but it also includes interactions with other academics in forums that extend beyond official settings
      i. Behave professionally
         A. In general, be a collegial grown up who is sensitive to and respectful of other people
         B. Cultivate the skills required to engage in the frank discussion of ideas in a respectful way
            1. Be able to converse/debate/disagree with your colleagues (and anyone else) without being rude
            2. Without being dismissive, belittling, derisive, or bullying about it
        4. Also, don’t be a jerk: [https://aeon.co/essays/so-you-re-surrounded-by-idiots-guess-who-the-real-jerk-is](https://aeon.co/essays/so-you-re-surrounded-by-idiots-guess-who-the-real-jerk-is)
          ii. Keep an eye out for (and obviously don’t engage in) blatant sexism, racism, ableism, or any other kind of explicit or overt discrimination
          iii. But also try to become mindful of micro-aggressions, micro-inequalities and other subtler but also damaging forms of disrespect and discrimination, and do your best to help stop those too
   b. Go to department seminars
      i. You should consider it to be part of your responsibilities as a graduate student to attend these
         A. These kinds of talks are an important part of being a scientist
B. Going to them is a good way to see what problems scientists outside of Purdue are thinking about

C. Stay for the Q&A; it is often the best and most informative part

ii. You’ll be giving presentations like these in seminars and conferences and job talks of your own in coming years, so come see instances of how they can be done well (and perhaps more instructively, poorly)

iii. Also consider going to interesting talks offered by other entities and organizations at Purdue too

A. [link]

B. There are tons of other events on campus, about which you will get many emails

5. Be aware of what’s going on in the larger world of Earth, atmospheric, and planetary sciences that you are working hard to be able to enter as a credentialed member

a. One good way to keep your fingers to the pulse is to sign up for journal e-mail alerts, so that you are learning about new science right as it is published

b. The journals you’ll want to sign up for will vary by your discipline, but good ones for most EAPS disciplines include (but are not limited to) Geophysical Research Letters, Earth and Planetary Science Letters, Nature Geoscience, and various sub-journals in the Journal of Geophysical Research

c. Also consider signing up for alerts for the broader journals Science and Nature, which will include many papers from outside EAPS disciplines

6. Publishing

a. To be a competitive candidate when you get to the job market, you will almost definitely need at least one first-authored publication in a peer-reviewed journal on your CV

i. It wouldn’t be misguided to treat having at least 1 first-authored publication as a necessary condition to going on the job market (for a position like a postdoc – a successful application to a tenure-track job will require more)

ii. Similarly, necessary to being competitive is having a few conference participation lines on your CV

iii. A common opinion for PhD students is to graduate with three first-authored papers either published or in the journal review process, but this idea varies between advisors and sub-disciplines, so check with your advisor and thesis committee.

b. What about co-authored work, with other grad students, with professors, etc.—is it encouraged, okay?
i. Yes! Being a co-author on other papers is great, but make sure it is not replacing your first-author work.

ii. Almost certainly, any and all papers you’ll publish in grad school will not be single-authored. You’ll likely at least have your primary advisor as a co-author, and potentially other collaborators as well. That’s OK and does not detract from your leadership of the project!

c. **Good advice** on crafting a paper for a specific venue, namely so that it can grow up to be an article in an academic journal
   i. Written by someone who is an editor of the journal it appears in & is nominally about *(American Ethnologist)*
   ii. But a lot of the advice is portable, applies to any journal
   iii. And reflecting on where it *doesn’t* apply can be a useful and illuminating exercise, too

D. It Takes a Village: Developing a mentor network

1. Finding your network
   a. There are many sub-disciplines and specialty areas and smaller communities within EAPS at large
   b. In all of them, it should go without saying: be professional
   c. Tapping into these and getting to know their members is one good way to
      i. Become professionally active and aware
      ii. Do things to increase your professional visibility and earn recognition from other scientists
   d. Go to conferences
      i. Make sure to include some good, big conferences (the AGU Fall Meeting has thousands of attendees and is a common one for most of us in EAPS)
      ii. Also go to some smaller meetings if possible – these can often be just as if not more valuable than the large conferences for networking purposes
      iii. Sign up to chair sessions for conferences that give you that option after you’ve been in grad school for a couple of years
      iv. Sign up to be considered for “best presentation” conference awards – getting them is fantastic, and even if you don’t, you can sometimes (though not always) receive useful feedback
      v. Make new friends
         A. Schmooze with people between sessions
         B. Get meals and drinks after sessions
   e. Again, take advantage of our department colloquium
      i. Attend visiting speaker’s talks when they give them, and go to lunches with the speaker when possible
      ii. If someone is in your field or particularly relevant to your work, consider signing up for a 1 on 1 meeting
with them, or go to the graduate student lunch if there is one

2. Mentor Network: there are many practical reasons you will want to start developing a network of mentors that’s anchored here, but that also expands beyond your home department and institution
   a. These will be people you can tap for invaluable professional advice as you move through the stages of your career
   b. Another important one is for letters of recommendation
      i. People who know you and your work
      ii. People who will be willing to write letters of in support of various things you will apply for
      iii. People who can go to bat for you in less formal ways both in the job market, but also suggesting you to give seminars, suggesting you to participate in research projects and get you plugged into the profession in various ways

3. Online presence
   a. Once you have a few conference abstracts and/or a publication, strongly consider making a Google Scholar page.
   b. Similarly, consider making a professional website. The website should include your e-mail, a summary of your research interests, and a CV, all of which you keep reasonably up-to-date.
   c. Figuring out if and how to do social media while developing a professional identity is not easy, but here are some thoughts:
      ii. Which links to: https://blog.apaonline.org/2018/08/01/women-in-philosophy-social-media/
   d. It is certainly the case that being on social media can help raise your visibility, and doing social media badly can actively hurt a nascent career. It is also the case that not being on social media will not actively harm your career. Use the principle of “First, Do No Harm.”

4. Teaching
   a. Most jobs after grad school will primarily be evaluating your research record, not teaching (an important exception are non-R1 colleges, like liberal arts schools)
   b. However, teaching or TA-ing can still be a valuable and useful experience, especially if you think you want to get a job in academia; all faculty jobs will ask for a teaching statement.
   c. Purdue’s Center for Instructional Excellence is a good resource
5. Letters of Recommendation
   a. These are among the most important components of a job application and professional identity you will be developing as you move through graduate school and apply to jobs
   b. Job listings will typically ask for three letters
      i. Your primary grad school advisor should be one
      ii. Other letter writers can come from people on your thesis committee
      iii. Letter writers from outside Purdue, if you have such collaborations, can be very helpful
   c. Who to ask, and how
      ii. When someone agrees to give you a recommendation, give them a CV to help them write your letter

II. The Job Market
   A. When you get to the job market, what your application will need will depend on the job – postdoc, industry, research scientist, tenure-track faculty, etc.
      1. All cases will require a CV, so get in the habit of keeping your CV looking nice and frequently updated
      2. Many jobs will require a written statement of your past and/or future research plans. This needs to be clear, well informed, engaging and make your past work sound interesting and important. It should be extremely well written.
   B. You will need to be able to talk about your past research
      1. Have a 30-45 second “elevator speech”
         a. Explain your work to people who aren’t familiar with it
         b. “People” here includes anyone and everyone
            i. Not just your committee
            ii. Not just people in the department
            iii. Not just other grad students and academics
         c. Be able to quickly, engagingly – and so without a ton of jargon – state what you’re doing and why it’s worthwhile
            i. The initial intent at this point is exclusively communicative (rather than self-expressive or argumentative)
            ii. No one else can read your mind ever, but doubly so when your mind has been marinating in and trying to push the boundaries of some scientific topic for years
      2. Be able to expand on the elevator speech, so it can easily transition into a more detailed 5ish minute “cocktail party” conversation
         a. Again packaged & deliverable in a snappy accessible way
         b. Conveys what you're trying to do, what you're arguing for, and why it's interesting and important
         c. Vivid concrete illustrating examples tend to be effective
      3. In similar vein, as you’re getting close to the job market, you should also do mock interviews/practice talks. For many positions, giving a presentation on your research will be the most important
part of the interview!
   a. Develop the ability to answer questions on your feet
   b. Be able to easily move between levels of detail in response to interruptions and (sometimes whacky) questions
      i. While keeping your bearings
      ii. Without losing control of the conversation
   c. Get feedback in a friendly environment on how to improve and fine tune all of this
   d. Your slides for interview talks need to look excellent
4. Have something to say about where you see your research going after you finish graduate school or your current position
   a. Don’t get blindsided or left speechless by the inevitable “where do you see yourself in 5 years” question, which is a very common question for tenure-track jobs
   b. Have something coherent to say about what type of research you want to do after your current position
      i. Keep in mind that no one is going to hold you to what you say here
      ii. But you need an articulate and plausible answer
      iii. It’s often useful to make yourself think through it
C. These may seem rather distant at this point, but beginning to develop these kind of “presentation” skills (for use in both casual conversational and more professional formal settings) now and as you move through graduate school will pay dividends when you get to the job market