Managing Your Career: NEW On the Cutting Edge Online Resources for Graduate Students, Post-doctoral Fellows, and Early Career Faculty

Carol Ormand, Science Education Resource Center
R. Heather Macdonald, College of William and Mary
Cathryn Manduca, Science Education Resource Center

Preparing for an Academic Career in the Geosciences

Applicants to the annual Preparing for an Academic Career in the Geosciences workshops cite three majors areas of concern as they prepare to make the transition to faculty members: the job search process, preparing to teach, moving their research to a new setting. Our online resources address their common questions.

Moving Your Research Forward

Thinking about how to move your research to a new setting, build on your dissertation, and get your work published can ease the transition to faculty researcher.

At the suggestion of our workshop participants, we are also developing a page for postdoctoral fellowships, including resources on choosing whether to do a postdoc, finding or creating postdoc opportunities, and getting the most out of a postdoc experience.

The Job Search

Finding an academic job is unlike most other job search processes. From identifying what kind of academic institution would be a good fit, through the application and interview process, to negotiating a contract, the process can be quite daunting. In addition, dual career couples are becoming more and more common in academia, making the search process even more complicated for many applicants..

Beginning Your Search

Read career profiles of geoscientists in a variety of academic settings to learn what life is like at different kinds of colleges and universities. Then follow our links to sites with nationally advertised job listings.

Assembling Your Application Materials

Learn how to prepare your c.v., teaching and research statements, and cover letter, and to cultivate strong letters of reference. Use our online worksheet to develop your teaching statement.

At the suggestion of our workshop participants, we are also developing a page for international students and postdocs, addressing the additional challenges they face in the job search process.

Preparing to Teach

While many graduate students get some teaching experience during graduate school, not all do, and few are taught pedagogical best practices. Even those who teach do not all have the opportunity to design a course or lab, or to prepare a lecture.

Interviewing

Know what to expect in your interviews, including common academic interview questions.

Negotiating

Learn about the negotiation process and what is negotiable.

Dual Career Couples

Read about dual career geoscience couples in a variety of academic settings -- their job search strategies, challenges, and successes.

The Problems

* Many graduate students and postdoctoral fellows do not fully understand the academic job search process.
* Many graduate students are uncertain about how to create a research program that builds on their dissertation research but is distinct from it, and about how to transition from the research to a new academic setting.
* While graduate students and post-doctoral fellows are highly trained scientific researchers, how to be an effective educator is not typically part of their graduate education. New faculty members can become effective teachers more quickly if they learn how to incorporate "best practices" early in their careers.
* Only a very small proportion of new faculty members exhibit the habits that will guarantee their success in academia: working moderately (but consistently) at teaching, research, and collegiality. Most struggle with one or more of these tasks; for example, many new faculty members work immoderately at teaching, neglecting the development of their research programs (Boice, 2000).

Our new resources ease the transition from graduate student to faculty member.

One Element of a Solution

Our webpages are one facet of "On the Cutting Edge," a comprehensive professional development program for academic geoscientists. These online resources complement the annual Cutting Edge workshops for graduate students, postdocs, and early career faculty members. The goal of the webpages is to collect, create, organize, and make accessible resources to ease the transition from student to professor. The resources we've collected and created are based on the interests of workshop participants, and on our collective experiences as faculty members and pedagogical researchers.

Website visitation statistics

Our "Preparing for an Academic Career" site currently gets more than a thousand visitors per month, and our "Early Career Geoscience Faculty" site gets more than four thousand visitors each month.

How you can help

We are currently working on adding pages addressing the question of whether and how to become a post-doc, and on the specific challenges faced by international graduate students, post-doctoral fellows, and faculty members. We welcome suggestions for other additions.

Reference:

Boice, Robert (2000). Advice for New Faculty Members: Nihil Nimus. Needham Heights, MA: Allyn and Bacon.

Early Career Geoscience Faculty

Applicants to the annual Early Career Geoscience Faculty workshops cite four majors areas of concern: getting their teaching "up to speed," getting their research program up and running, getting and staying on track for tenure, and balancing all of their personal and professional responsibilities. Our online resources address these common challenges.

Getting Tenure

The tenure process is a major source of stress for many new faculty members. Our resources demystify the process.

Efficient, Effective Teaching

New faculty members want to know how to be effective teachers, without it consuming all of their time. Our resources focus on techniques for maximizing your efficiency, understanding how students learn (and how to measure their learning), incorporating best practices - even in large classes - and documenting your successes.

Making Choices: Finding Your Balance

Balancing competing demands on your time is essential to your success and well-being. Read about how other faculty members manage it.

Planning Your Program & Making Time

Use our worksheets to plan your research, and learn about task management so that you can make time for it.

Developing a Thriving Research Program

Building a successful faculty research program involves several new challenges for early career faculty: planning your program, getting funding, collaborating with students, and making time to do the work.

Collaborating with Students

Successful faculty members make the most of their collaborations with student researchers. Read about how several different faculty members, at a wide variety of institutions, work with their students.

Funding Your Research

Our collection of recent, successful proposals provide excellent models of grant-writing skills. They may also give you some ideas about where to look for funding.