Using Campus Resources in Preparing Future Geoscience Professionals: Observations from a Career Counselor

Julie Miller Vick, University of Pennsylvania
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Background: Penn’s Career Services, a centralized career office

Who we serve:
• Students – undergraduate and graduate and postdoctoral fellows – approx. 17,000 in nine of Penn’s twelve schools
• Alumni
• Employers
• Graduate and Professional Schools
• University Community – faculty, administration, other campus offices
• Parents
• “Outside World” – journalists, researchers
Background: Penn’s Career Services, a centralized career office

Who we are:
• 17 Counselors including 1 Director, 6 Associate Directors, and 5 part-time Counselors
• 5 Administrative Assistants
• 1 Information Resources/Webmaster and 1.5 Credentials Officers
• 1 Business Manager and 1 Receptionist
• 1 Jobs & Internships Coordinator/Systems Administrator and 2 Recruiting Managers

We are organized into 6 units, 5 by school and 1 by function:
• College (undergrad)
• Wharton Business (undergrad)
• Engineering (undergrad and graduate)
• Nursing/Education/Social Work (undergrad and graduate)
• Grad Arts & Sciences/Biomedical/Design (graduate)
• Pre-Law/ Pre-Med/Pre-Grad

Location:
Center of campus. A welcoming office space with individual offices for counselors, a library and a spacious recruiting center
Types of Programs and Services provided by Penn’s Career Services: Appointments and Walk-ins

Students can schedule time to meet with counselors.
- Appointments are generally ½ hour.
- Walk-in hours are held daily during specific times to answer quick questions. These cannot be pre-scheduled.

These are opportunities for:
- discussion of career-related concerns
- discussion of job hunting strategies
- identifying potential employers
- critiques of job hunting materials such as resumes, CVs, cover letters, statements of teaching philosophy, etc.
- referral to faculty and campus resources

5,264 appointments
2,846 walk-ins
Total: 8,110 office- wide for 2005-2006
Types of Programs and Services provided by Penn’s Career Services:

Workshops and Panels-1

Invited speakers (alumni, faculty, local employers):

Specific career fields:
- Careers in Government
- Internships in Scientific Research
- Careers in Technical Writing
- Wall Street Job Opportunities for Quantitative PhDs

Specific graduate programs:
- The Law School Experience
- Life as a Medical Student

Specifically for graduate students & postdocs:
- Behind the Scenes with a Search Committee
- The First Year on the Job
- Understanding Tenure
- Expanded Career Opportunities for PhDs in the Sciences
Types of Programs and Services provided by Penn’s Career Services: Workshops and Panels-2

Done by Career Services staff:

- Resume Writing / Preparing Cover Letters
- Interviewing Skills
- Business Etiquette
- Preparing to Interview for Academic Jobs
- Applying to Graduate and Professional School
- How to Find a Summer Internship
- Managing Difficult Work Relationships
- Negotiating a Job Offer
- Changing a CV to a Resume

Total number of workshops and panels = 316
Total attendance = 9,610
Types of Programs and Services provided by Penn’s Career Services:

Employer Information Sessions

Opportunities for employers/organizations to:

- Speak about their organizations and the positions for which they are hiring
  - Applying for a AAAS Fellowship
- Speak on specific subject-related topics:
  - Mastering the Case Question
  - Introduction to Investment Banking for Liberal Arts Students
  - How Large Pharmaceuticals Hire Scientists
  - Career Opportunities in US and Global Market Research

Total number = 281 (this year will be over 300)
Types of Programs and Services provided by Penn’s Career Services: Additional Employer Contacts

**Career Fairs**
Ten different career fairs
- Some are large events to which we invite a wide range of employers.
- Some are organized by school or industry (ie, International Opportunities Career Fair, Social Services Career Fair, Biomedical Career Fair).
Total number of employers attending career fairs = 435

**On-Campus Recruiting**
- Employers come to campus to do preliminary interviews for permanent or summer positions.

Total number of firms recruiting = 387    Total number of on-campus interviews = 12,620
Additional Programs and Services provided by Penn’s Career Services

Graduate and Professional School Information Sessions
• Opportunity for graduate and professional schools to speak about their programs and entry requirements.
  Total number = 68

Penn Career Network (PCN) / Penn Alumni Career Network (PACNet)
• Alumni volunteer to serve as career advisors/mentors to current students and other alumni. Not to be used directly for job hunting, but as a networking tool.
  Total number of alumni in the PCN = 3,400

Copies of The Academic Job Search Handbook for PhD students for $5.00
• Career Services subsidizes cost of book.
Additional Programs and Services provided by Penn’s Career Services

Credentials Service / Letters of Recommendation
- Students/alumni keep letters on file in our office and request that they be sent as needed.
Total number of credentials requests filled = 8,645

E-mail distribution lists
- We forward job descriptions and information on special programs, speakers, and careers.
- We reach literally thousands of students and alumni a day/week.

Career Plans Surveys
- Students are surveyed about their summer experiences (as juniors) and immediate plans after graduation (all graduates).
- Results are public on the Career Services Web site.
- Statistics on admissions patterns of Penn graduates to law, medical and graduate school are maintained.
Additional Programs and Services provided by Penn’s Career Services

Web site
• Development, maintenance and improvement of Web site is the responsibility of all Career Services staff.

Total number of visits to the CS Web site = 27,013,685

Career Services Library
• Approximately 2500 books and periodicals relating to career fields, job search advice, graduate study, internships, living/working abroad and more.

Total number of library resources: 2,533
Ways departments and career offices can work together

Invite career counselors to attend and speak at departmental functions, mandatory meetings:

- Senior seminars
- Accepted graduate student events
- New graduate student orientations
- Pre-job market meetings for graduate students
Ways departments and career offices can work together

Faculty members can offer/agree to speak at career programs

- What is involved in being an academic
- Aspects of the academic job search
  - Interviewing
  - Negotiating offers
  - Having a life
- Applying for grants
The Eleventh Annual Faculty Conversations on the Academic Job Search and Academic Life – 2006
A Series for Ph.D. students and Postdoctoral Fellows, co-sponsored by Career Services and the Deputy Provost

Tuesday, January 17, 4:30 – 8 pm  
Amado Recital Hall, Irvine Auditorium
PARENTING IN THE ACADEMY
• Emily Steine, Associate Professor of English, University of Pennsylvania
• Lorin Thomas, Assistant Professor of History, Rutgers University, Camden
• Ralph Rosen, Professor and Graduate Chair Classical Studies, University of Pennsylvania

Tuesday, January 31, noon – 1:15 pm  
Room 97, McNeil Building
PREPARING FOR CAMPUS INTERVIEWS FOR ACADEMIC JOBS—HUMANITIES AND SOCIAL SCIENCES
• Brian Rose, Professor/Chair of Art and Archaeology of the Mediterranean World, University of Pennsylvania
• Maren Aukenman, Assistant Professor of Education, University of Pennsylvania

Tuesday, January 31, 4 – 6:30  
Ben Franklin Room, Houston Hall
PREPARING FOR CAMPUS INTERVIEWS FOR ACADEMIC JOBS—SCIENCE AND ENGINEERING
• Julie A. Blendy, Associate Professor of Pharmacology, University of Pennsylvania
• Caroline L. Schauer, Assistant Professor of Materials Science and Engineering, Drexel University
• Lia Vas, Assistant Professor of Mathematics, University of the Sciences in Philadelphia

Tuesday, February 7, noon – 1 pm  
Graduate Student Center, Room 305
BEHIND THE SCENES WITH A SEARCH COMMITTEE
• Susan Davidson, Professor of Computer & Information Science/Deputy Dean of the School of Engineering and Applied Science, University of Pennsylvania
• Robert J. DeRubeis, Professor of Psychology/Associate Dean for the Social Sciences, School of Arts and Sciences, University of Pennsylvania

Thursday, February 9, 4:30 – 8 pm  
Ben Franklin Room, Houston Hall
NEGOTIATING AN ACADEMIC JOB OFFER – HUMANITIES AND SOCIAL SCIENCES
• Sarah Igo, Assistant Professor of History, University of Pennsylvania
• Laura W. Perna, Associate Professor of Education, University of Pennsylvania

Monday, February 20, 4:30 – 6 pm  
Ben Franklin Room, Houston Hall
NEGOTIATING AN ACADEMIC JOB OFFER – SCIENCE AND ENGINEERING
• Daniel Lee, Associate Professor of Electrical & Systems Engineering, University of Pennsylvania
• David B. Weiner, Chair, Gene Therapy and Vaccines Program/Associate Professor, Department of Pathology and Laboratory Medicine, University of Pennsylvania

Tuesday, February 21, noon – 1 pm  
Room 97, McNeil Building
PARENTING IN THE ACADEMY
• Stephanie Zmancic, Assistant Professor of Computer & Information Science, University of Pennsylvania
• Rita Balice-Gordon, Professor of Neuroscience, University of Pennsylvania

Tuesday, February 28, noon – 1 pm  
Graduate Student Center, Room 305
UNDERSTANDING TENURE
• Janice Bellace, Deputy Provost/Samuel Blank Professor of Legal Studies, University of Pennsylvania

Monday, April 3, noon-1pm  
Graduate Student Center, Room 305
PARENTING IN THE ACADEMY
• Tracy L. Bale, Assistant Professor of Neuroscience, School of Veterinary Medicine, University of Pennsylvania
• Cheryl Jones-Walker, Ph.D. candidate in Education
• Cyrus Mulready, Ph.D candidate in English

Thursday, April 20, noon – 1 pm  
Room 97, McNeil Building
PREPARING FOR/MAKING THE MOST OF YOUR FIRST YEAR IN A NEW FACULTY POSITION
• Evelyn Thompson, Assistant Professor of Physics, University of Pennsylvania
• Karen Beckman, Assistant Professor of the History of Art, University of Pennsylvania
• Kristen Barknett, Assistant Professor of Sociology, University of Pennsylvania

For the noontime programs, feel free to bring your lunch. Please sign up by sending an e-mail message to mdelanjo@jebbox.upenn.edu.
Ways departments and career offices can work together

Results of collaboration:

• More students from those departments take advantage of services from career office.
• By inviting career office staff to classes, orientations, etc., faculty give their “seal of approval” for students to take advantage of the services of the career office.
• It’s a chance for career offices to build relationships with future alumni from whom current students can learn.
Ways departments and career offices can work together

Share results of career plans surveys
• Post them on department and career office websites

Departments can encourage career exploration
• On website, link to career office website and other career websites such as
  – sciencecareers.org
**Geology**

The list that follows are the first jobs taken/graduate schools attended by Geology majors immediately after their graduation. The data are collected from Career Services’ annual survey of students graduating from the College.

Link to Geology Homepage.

**JOBS TAKEN BY GEOLOGY MAJORS**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darlington School</td>
<td>Science/Math Teacher</td>
</tr>
<tr>
<td>Horizon Well Logging</td>
<td>Geologist</td>
</tr>
<tr>
<td>International Technology Corp.</td>
<td>Engineer/Environmental Scientist</td>
</tr>
<tr>
<td>Janus School</td>
<td>Teacher</td>
</tr>
<tr>
<td>L’Oreal</td>
<td>Junior Chemist</td>
</tr>
<tr>
<td>NYC Teaching Fellows</td>
<td>Secondary School Teacher</td>
</tr>
<tr>
<td>Schlumberger</td>
<td>Field Engineer</td>
</tr>
<tr>
<td>University of Pennsylvania</td>
<td>Research Assistant</td>
</tr>
<tr>
<td>US Tax Court</td>
<td>Trial Clerk</td>
</tr>
</tbody>
</table>

**GRADUATE SCHOOLS ATTENDED BY GEOLOGY MAJORS**

<table>
<thead>
<tr>
<th>Field</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Engineering</td>
<td>University of California - Berkeley</td>
</tr>
<tr>
<td>Geology</td>
<td>Massachusetts Institute of Technology</td>
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<tr>
<td></td>
<td>Stanford University</td>
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<td></td>
<td>University of California, Davis</td>
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<td></td>
<td>University of California, Los Angeles</td>
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<td></td>
<td>University of Pennsylvania</td>
</tr>
</tbody>
</table>
Faculty members wanting to help with career issues

• Be aware of the resources on your campus and partner with them:
  – Speakers at orientations, classes, and accepted students events

• Ask them to organize programs on specific topics and provide resources to accompany the programs:
  – Visits by companies
  – Panels on topics of interest
  – Career fairs
Career Counselors contact department chairs/graduate chairs

For example, at Penn we announce
- Programs and workshops
- Academic Job Search Handbook
- Credentials service
by e-mail to the graduate chairs listserv.

Invite faculty to speak on panels.

Some career offices get faculty on the search committees for new career office counseling staff to help with candidate decision and to “make friends”.

Other things departments can do for their graduate students

Some departments link faculty searches to workshops for graduate students and post-docs.

- Students who attend these "workshops" can:
  - learn about CVs by critiquing the CVs of those candidates for positions
  - attend interviews and job talks of candidates and then critique them in a workshop.

Departments can assign a faculty member to be placement chair or career advisor.

- Would work with each PhD student on job search dossier.

Co-sponsor activities with other departments or offices.
Student organizations

Student organizations can work with departments or career offices to bring in speakers and organize industrial/corporate recruiting visits.

Student and/or postdoc groups often invite career staff to give talks on networking, interviewing, etc.
Penn’s Earth and Environmental Sciences career plans at graduation

Sixteen PhDs 2002-2006
Assistant or Associate Professor - 7
Postdoc – 3
Non-tenure track teaching position – 3
Curator - 1
Industrial geologist - 1
Unknown - 1

Undergraduates
About 1/3 go to graduate school and more than half of those in earth or environmental sciences disciplines.
Of those who take jobs, about 1/3 work with a science organization, 1/3 with companies or law firms, and a 1/3 in education and non-profits.
Final observations

College/university career counselors:
• Educate
• Provide information and resources
They don’t have an agenda.

Faculty can help by:
• Validating all career interests even if not in discipline
• Engaging students in conversations about career interests
• Encouraging students to use campus resources