

Compiled Career Sessions Questions

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General Questions

Skills & Training

- What skills and experience do you recommend for someone pursuing this career path?
- What skills learned in graduate school have been the most helpful?
- What skills, not necessarily taught in graduate school, are the most helpful for this career (creativity, emotional distancing, emotional involvement, language/communication, manual dexterity, leadership, physical ability, persistence, social skills, time management, logic/reasoning, negotiation, etc.)?
- Are there additional education requirements, degrees, licenses that are needed for your career?
- What are the three things that you wish you did when a graduate student to prepare you for your career?
- How important was your post-doc in obtaining your current position? Is there a particular type of postdoctoral position you would recommend?

Career Decision

- How would someone know if this career is best for him or her?
- Why did you choose this career?
- What do you wish you knew (but didn't) when you first contemplated this career? What are the three things that you wish you knew or did when a graduate student to prepare you for your career?
- Would you choose this career if you could make the decision again?
- What (if anything) might you do differently? Common mistakes people make choosing this career path?
- Did you follow your original career plan or have life events guided you to where you are now?
- Does choosing an atypical or "alternative" career path limit a person's career opportunities?
- If you could leave us with one piece of advice, what would it be?

Career Transitions

- What step should someone take today to transition into this career path?
- What are the best opportunities available to people entering this career? How does someone create opportunities for pursuing this career path? Suggestions for gaining experience?
- What was the most difficult transition in your career? What factors are important to consider when transitioning from graduate school? Transitioning between jobs? Transitioning between careers?

Job Search

- **Most Popular Question:** Suggestions for job searching with spouse? In different fields? In same field? Advice for coordinating careers?
- What types of applicants are most successful at entering this career?
- What type of postdoctoral position, if any, would you recommend for pursuing a similar career path?
- Are there related or similar careers you recommend?
- Where can someone find more information about this career (i.e., associations, on-line)?

- How does someone identify a position that matches their skills?
- What skills and attributes do you look for most in a CV?

Outlook

- What is the outlook for this career? How do you see the jobs in this field changing over the next five years? What can someone do to prepare for such changes?
- Is there a shortage or oversupply of people in this career today?
- Are there any trends (e.g. demographic, social, legal) that concern you? Any trends that will make this career choice more or less attractive in the future?

General Employment

- How many people are employed within your organization? How many people are employed within your department?
- What's the impact of your position? In your company? In science? Human health?
- What's your least favorite part about your job?
- What is the work culture like in your current job?
- Is most of your time spent working independently or collaboratively?
- What's the strangest thing you've ever done in your job?
- What are the most and least rewarding aspects of your job?
- Are there opportunities to travel?
- What about flexible scheduling, telecommuting, and alternate work schedules?
- Biggest myth about your job?

Work/Life Balance

- What is a typical "Day in Your Work Life" like?
- **Popular Topic:** How is balance between work and family? Time for children? Family leave?
- Do you notice challenges specific to women or minorities in your career? Is there still a 'glass ceiling' for either group?

Challenges

- What are the biggest challenges in your job?
- What's the first 60 days like? Steep learning curve?
- What would you be doing right now if you weren't here? What's the most exciting minute of your job?
- What are the working conditions like (stress, pace, physical comfort, travel, environment, relocation, hours, routine vs. crisis, etc.)?

Further Career Development

- Where do you turn for mentorship and advice?
- Opportunities in different cities/states/countries?
- Are there additional career opportunities? How do you recognize a worthwhile opportunity?
- Can someone progress at his or her own pace, or is the career path structured?

Financial

- How good are the benefits?
- How much money does this career provide at the entry level? After you work for 10 yrs.?
- Maximum potential for most talented/experience people? How much of the \$\$ is usually base pay, bonus (performance driven), profit sharing, stock/partnership ownership, etc.?

Science Writing, Editing & Communication

Description: Do you enjoy explaining your work, and science in general, to non-scientist friends more than working in the lab? Though no longer at the bench, science communicators still enjoy a career that satisfies their intellectual restlessness. They report on science trends, discoveries, personalities, and policies, often from the lab or in the field. Careers in science communications run the gamut from editing primary scientific papers to communicating findings to the general public and utilizing social media to highlight the latest discoveries. This session will discuss the range of career options available to science communicators and how to acquire the required skills and experience to become a successful science communicator.

Session-specific questions:

- Is there a "standard" path to become a science writer? Or mostly serendipity?
- How much does this field overlap with science policy? Surely, some science that you report on has great ethical and social implications.
- What are the differences and similarities between communicating science to the general public, and making editorial decisions about what science to publish in a journal?
- What research/science skills translate best to a career in science writing?

Law, Consulting, & Intellectual Property

Description: Moving into the business side of biotechnology via law, consulting, and intellectual property allows you to directly influence the direction of science without having to stay at the bench. In all business positions one must be able to successfully use his/her expertise to quantify risks and rewards of creating and maintaining various biotechnologies. This session will help identify specific skills needed to be successful in these fields as well as how might to acquire them.

Session-specific questions:

- What legal careers are available for someone with a science background?
- What differences are there in a legal job search, or in legal employment networking?
- How often are you the only “science person” in the room? How much of your job is explaining complex scientific concepts to non-scientists?
- Does leaving the lab mean abandoning science?
- Can it be difficult to manage clients with various personalities?
- Do you recommend pursuing an internship as stepping-stone for a permanent position?
- A PhD has very focused scientific knowledge, but one might think a broad science-based knowledge is better. How difficult is it to adapt?
- Is this career better for someone who like to work independent or collaboratively?
- Is it common for consultants to leave the firm to work for one of their former clients?
- Due to the intensity of the work, how often do people move on to a different job?
- What research/science skills best translate into a career in consulting?
- How do you get the extra training?

Opportunities in Government

Description: The U.S. government offers a wide variety of career paths from regulatory science (FDA), to grants management (NIH and NSA), to science policy, to public health (CDC), to patents/tech transfer (USPTO), to justice (DEA), and to bioterrorism (FBI). This session will feature a panelist who will speak on working in the government, a path taken to this destination, and desirable training and career steps looked for to enter into government service.

Session-specific questions:

- Federal employment job security – does anyone get fired?
- How does a research job differ from an administrative job?
- If you're a researcher, do you still apply for grants?
- Is it difficult or hard to transfer between agencies?
- Do you need to wait for the person above you to retire in order to advance?
- Do most government employees only work forty hours per week?
- How difficult is it to find satisfaction in your job – when taxpayers and politicians are so critical of federal employees?
- Are interagency temporary work placements available?
- How do you apply? Do all applications go through USAjobs.gov?
- How does politics influence your job?
- Are politicians difficult to work with?
- Most of the skills from graduate school are limited to techniques learned at the bench, critical thinking and the ability to synthesize information, how does someone transfer these to a career in government.
- Are jobs mostly in the DC area?
- Is an internship more advantageous than a postdoctoral position? Are there internships you might recommend with professional groups, non-profit organizations, or congressional offices? How does someone find these?
- How hard is it to bridge the gap between science, politics and the general public?
- How frustrating is it that policymakers do not understand much science?

Entrepreneurship

Description: Many scientists strive to have their ideas become successful business ventures. A successful entrepreneurial career is a challenging path to take, but the result could be very rewarding and high impact. Additionally, scientists often wonder what it is like to work in a small start-up company. This session will combine entrepreneurs who started their own business with researchers who took the risk of joining an early stage company.

Session-specific questions:

- What skills and traits are necessary to become a successful entrepreneur?
- What are the different aspects of the job? It seems like this profession in particular might necessitate being a jack-of-all-trades.
- What is a business plan?
- What do you have to consider from the business, science, legal and marketing standpoints when starting a business venture?
- What are the financial challenges to starting a business? What are the first steps someone should take once they have a good idea for a business or product?
- What makes for a successful venture?
- What types of people do you have to work with, and hire?
- How do you get capital to start a business?
- What happens if your business fails? Do you worry about failure?
- If you could offer a first-time entrepreneur only one piece of advice, what would it be?
- Besides money, what are your favorite ways to compensate people?
- When will you consider your job a success?
- What creative things do you do to develop a likeable company culture?
- How does someone identify jobs at a start-up? What can you tell a good opportunity from a bad one?

Careers in Biotechnology

Description: When most people think a career in biotechnology, they think of a scientist in a white coat in a laboratory developing drugs to improve the quality of life. However, biotechnology has a wide variety of career opportunities ranging from sales and marketing, to research and development, to manufacturing and quality control and assurance. Understanding the differences will ensure the best fit for your strengths and what you value in your work. Panelists for this session will describe their working environment and how it may or may not be a good fit for you.

Session-specific questions:

- What are the hiring processes at your companies?
- If someone wants to work in the biotech industry, do they have to move to one of the large coastal hub areas like Boston or San Francisco?
- Is there an opportunity to be mentor or be mentored?
- What do you enjoy most about working for the company? What do you like and dislike about it?
- What does a new employee need to accomplish in the first 6 months to demonstrate they met expectations?
- Important to be seen/heard?
- How is the opportunity for recognition and rapid advancement?
- Can you attend conferences and publish papers?
- Is constant change is the norm in a small company?
- Are a broad set of skills better than expertise in just one? Or should someone postdoc in a similar area to focus their expertise?

Being an Attractive Candidate to Industry

Description: A senior executive highlighting what factors industry considers during a search for top Ph.D. level candidates. The panel provides an insider's view on how to translate your academic experience into industry terms. The discussion will cover how to position yourself to secure a vibrant career in chemistry.

Session-specific questions

- What kind of document do you send a company, a CV or a Resume?
- What do you need to know to interview successfully by telephone?
- What advice can you give about interviewing successfully in person?
- What do you do if you are asked about salary expectations in an interview?
- Would you recommend working with a recruiter or service to find a job? Who should pay a recruiter's fees?
- What skills and/or training do you think will be extremely valuable in the next ten years (analytical skills, MBA, FDA compliance experience, etc.)?
- What to do if you get laid off?
- Advice for applying for jobs when already employed?

Industrial Careers

In industry, the incentive of the work done at the lab bench is not a publication, but rather the desire to take a product or process from the research laboratory to the commercial market. This transition is a complex process. The industry panel represents different facets of this process. Speakers will discuss the development of a new product from the decision to pursue commercialization through project management, working environment, financial success and what led them to pursue this career path.

Session-specific questions

- What does an entry level PhD position look like? What duties are required for the position?
- How do entry-level positions fit into the overall organizational structure?
- What is the typical five-year (or ten-year) trajectory for someone starting in an entry-level position?
- How does the company measure performance?
- How much decision-making authority is given after one year?
- How is it responding to those above and directing those below?
- Is there any job security? Affected by the financial downturn?
- Do I need to do a postdoc to work in industry?
- How is the transition from academia to industry?
- Discuss project deadlines?

Postdoctoral Research

Description: A special kind of hell or a career defining career opportunity? Postdoctoral positions are a common, and often necessary, interlude between graduate study and regular employment. The experiences and training gained from a postdoc can shape the rest of your career. Yet it can be challenging to find out even the most basic information about such opportunities. Panelists will describe a variety of available options and discuss how to identify and secure those best for your career path.

Topics

Session-specific questions:

- What exactly is the point of doing a postdoc?
- Where should it be and how to get there? How does someone choose a postdoctoral advisor?
- Who's paying the tab?
- What makes for a good one, as opposed to a waste of time and an aggravation?
- What should someone expect to get out of it?
- How to identify a postdoctoral position
- What does someone need to do at a postdoctoral interview? Who should pay the interview expenses?
- Advantages of an industrial postdoc?
- A postdoc is not working out. The project does not seem to be going well, or they're not getting along with my PI. Should they leave?
- How will someone's career be affected if they do a second postdoctoral fellowship?

Science Education

Description: High quality science teachers can go a long way towards making science fun and exciting rather than boring or daunting. Even students bound for careers outside of science can benefit from critical thinking and data analysis skills developed through a strong science education. This panel will showcase a science education career at the undergraduate level, developing educational materials, and managing outreach programs.

Session-specific questions

- Is normal training in education necessary?
- What's the best teaching experience?
- Any advice for those interested without having taught in a classroom?
- How much time is spent developing educational materials?
- How are online resources changing the classroom?
- Is postdoctoral experience necessary to teach?
- What might someone do to improve his or her teaching credentials?
- Is it important to have a distinct teaching philosophy?

Does the Pharmaceutical Industry Remain An Ideal Career Path?

Description: The pharmaceutical industry combines a broad range of scientific disciplines that are critical to the discovery and development of new drugs and therapies. However the pharmaceutical industry is restructuring worldwide whereby bringing different ways of working and new challenges. As the industry moves away from internally focused research to an external model, is the pharmaceutical industry still the premiere job out of graduate school? This session will feature panelists sharing their thoughts on this topic and providing advice where the best opportunities reside.

Session-specific questions:

- Is research the priority? Or are small company acquisitions replacing research?
- Is there no job security – even if you're successful?
- In pharma is it easy to be pigeonholed into a specific job function? Won't there be more flexibility in a smaller company?
- What's the job outlook for Chemistry PhD students?
- Is the pay still better than other opportunities?
- What is the best way to find out about research opportunities in Pharma?
- How important is a network or 'connections' to this process?
- Does Pharma hire experts, not potential?
- How is your value to the company measured?
- How frequently are employees required to relocate and/or travel?
- How difficult is it to move from pharma into other careers?

Academic Career: Teaching- vs. Research-intensive Institutions

Description: An important question to consider when choosing an academic career path is “What type of academic institution and environment will best suit me?” The academic sector offers a wide range of experiences from teaching at a small liberal arts college to research- or teaching- oriented faculty positions at large universities and medical schools. This session will explore the expectations, challenges, and rewards of different academic environments and panelists will describe how they chose their individual career paths.

Session-specific questions:

Teaching intensive institution

- Work-Life
- What's the best next step after graduate school for a career teaching in a liberal art environment?
- What are the requirements to get tenure?
- Who's your boss?
- Do you do research 100% during the summer?

Research intensive institution

- Funding situation. Are grants getting harder to get?
- How do you choose a good research project?
- What's should be the goal of your research?
- What limitations are there besides funding?
- What are the difficulties with managing a laboratory?

Getting started

- Just landed that perfect job as an assistant professor. What first?
- How do you go about establishing a lab after your postdoc?
- How to go about hiring people? Identifying students?

Institutional guidance and support

- Don't be afraid to ask for help!
- Mentoring. How do you find a mentor?
- How much of your time is protected so you can do your job successfully?

Work-Life

- Family commitments?

General

- Challenges & advantages
- What about laboratory space, equipment and support for research?
- What does an annual contract entail?
- How to balance research, teaching, and other obligations: Is it a good idea to say “no” when asked to serve on committees or teach new classes?
- Resources available to assistant professors:

Applying for an Academic Job and Trying to Keep It

Description: Do you enjoy conducting your own research and working with students? Are you considering an academic career path? This session will highlight the application process and how to prepare for a tenure review. Discussions will range from understanding job qualifications and the search, application, interview and negotiation processes to what resources are made available to assistant professors, what tenure requirements consist of, and how to balance research and teaching obligations.

Session-specific questions

Getting prepared

- When is someone independent of their advisor – when to go on the job market?
- Do you need a high impact publication (Science, Nature)?
- How important is it to have received a grant/fellowship?
- How does someone demonstrate research independence from graduate/postdoctoral advisor?

Job search & interview

- How do you get noticed in the crush of 300 talented applicants?
- With schools receiving so many applications per opening, should I just apply everywhere and let fate choose for me?
- How does someone identify open positions?
- What should someone ask (or know) when interviewing for tenure-track positions?
- What should a research proposal look like? What defines a good research project? What are good general topics?
- Some applications require special sections, such as a teaching philosophy. Any advice?
- How important is it to research the faculty where I'm interviewing?
- What's the strangest thing that happened to you when interviewing?
- How can someone distinguish themselves from other candidates?
- What if a spouse is also looking for a position? Both are scientists. How do they find someplace with jobs for both of them?
- How can someone find out the tenure/retention rate of faculty? Is it important to consider this?
- Is it good to negotiate the start-up package? What about lab space?

Tenure

- How to know requirements for tenure?
- How important is teaching?
- Receiving tenure does not decrease your workload or the expectations placed on you.
- Importance of funding? How important is obtaining a major research grant?
- Is it about being productive or the project?