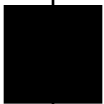


**GRADUATE
STUDENT
SERIES**

PHD PATHWAYS

ALTERNATIVES TO ACADEMIC CAREERS



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Ph.D. Pathways: Exploring Your Career Options

The purpose of this packet is to assist you in considering career alternatives to academic faculty positions. Many students find there is a lot of support for their academic job search and that it is a fairly clear process. For those considering other options, however, it may seem more daunting. People who are considering making a career transition sometimes falsely believe that their options are limited. The following misconceptions are common:

Misconception: *"I don't have any skills that will be useful outside of academia."*

Reality: In graduate school you develop a number of skills and personal qualities that are applicable to many types of jobs (refer to page 10).

Misconception: *"No one will hire me with so little work experience."*

Reality: Each year there are a number of Ph.D. students and alumni with limited work experience who become successful job seekers.

Misconception: *"It's impossible to get a job in this economy."*

Reality: It's not necessarily easy to get a good job, but effort and persistence do pay off. Many people who are unsuccessful job seekers put in little or no effort.

This packet is not intended to encourage you to leave academia, nor does it provide a foolproof method for how to do so. Instead, you will find:

- lists of career skills acquired through graduate study
- information on possible career fields to explore with an advanced degree
- differences between job seeking in academia and elsewhere
- advice from Ph.D. alumni about exploring career options
- information about conducting informational interviews
- information about job interviews
- recommended career planning resources available at the CDC

CAREER PLANNING

You may want to begin exploring your options by organizing a plan based on the following four steps:

Step 1: Self Understanding (assessing skills, interests, values, work style)

Step 2: Exploration (researching career fields, searching web sites, making contacts, finding mentors, etc.)

Step 3: Focusing (narrowing the field of options, overcoming barriers, making decisions, etc.)

Step 4: Job Search Strategy/Action Plan (developing resumes and cover letters, applying for jobs, attending CDC programs, etc.)

The CDC provides resources and counseling appointments to help you work through each of these stages.

Self Understanding:

You will find that the skills you developed in your graduate work will make you qualified for employment in settings outside of academia. Following is a list of skills that reflects abilities and qualities conducive to success in both academia and in the private and public sectors:

- flexibility, functioning independently in a variety of environments and roles
- teaching skills, conceptualizing, explaining
- counseling, interviewing, public speaking
- supporting a position with argumentation and logic
- creation and design of complex studies and projects
- implementation and management of all phases of complex research projects and follow through to completion
- knowledge of the scientific method to organize and test ideas
- organization and analysis of data, understanding of statistics, and generalization from data
- ability to combine, integrate information from disparate sources
 - critical evaluation
 - investigation, using many different research methodologies
 - problem solving
 - ability to work with the committee process
 - ability to do advocacy work
 - acknowledgement of many differing views of reality
 - comfortable working with ambiguity
 - use of both inductive and deductive reasoning

In addition to skills, there are a number of personal qualities developed in graduate school which are highly valued in most career fields:

- ability to learn quickly
- ability to make logical decisions
- analytical, inquiring, synthesizing
- ability to work well under pressure and willingness to work hard
- competitiveness, enjoyment of challenge
- ability to work on a variety of tasks simultaneously
- thorough, organized, and efficient
- time management skills
- resourceful, determined, and persistent
- imaginative, creative
- cooperative and helpful
- objective and flexible
- good listening skills
- sensitivity to different perspectives

The first step in career planning is to develop your own personal list of skills. You can use it to measure the probability of your fit to various career fields. In addition to skills, it is also important to reflect on your personality, interests, and values. The CDC offers assessment tools and can help you determine which new career options most appeal to you. Refer to page 10 for a chart of possible career options.

Exploration and Focusing:

"What Ph.D. Students Considering Alternative Careers Need to Know"

The following suggestions were made by Stanford Ph.D. alumni:

"Don't necessarily take the first position you're offered, as I did with a computer magazine, just to have a job right away, unless you really think you'll enjoy the work. I knew when I took the job that I wasn't interested in it but thought I could force myself to like it - - a big mistake!"

"Be sure to target a number of potential career avenues to pursue and pursue them all until you get a good fit; recognize that there are many meaningful careers through which you can use the skills and talents you've honed in grad school; develop an interesting and logical narrative that explains why you're looking to make a change; practice telling your story until you feel comfortable and natural telling it; and most important, be persistent!"

"Take pride in your academic achievements while opening your mind to career opportunities outside the university."

"Making a change to a non-traditional career path was the most frightening decision I ever made. It also was the best. The message that needs to be passed on is that the choices look far scarier from the inside of academia. Once out in the 'real world,' so many options become visible!"

"It's important to identify skills sets that are required in the corporate world. Networking is the best way to get information."

"You should develop an understanding that corporate people are interested in the product, and that they want high quality work, but they are not as interested in the process through which you worked, as they are in the product itself. Although work outside of academia may not be as scholarly as academic work, it is often just as challenging and more practical. In addition, there are many very bright people outside of the university."

"Determine how your personality matches the work you will do; understand how broad and flexible the opportunities offered by each alternative path are."

"Be flexible, keep an open mind, have self-esteem, and believe that your skills are transferable. Many of the skills you have developed are directly applicable and valued in the business world."

Differences in Job Seeking in Academia and Elsewhere

1. *Vitas are often longer than two pages, resumes are not.*

Try to keep a resume to one page, particularly for business or media fields. If it goes to a second page, make sure the first page contains the key information and the second page includes your name. The second page should be an addendum listing publications or other relevant information and should at least use half of the page.

2. *Vitas rarely contain bold, italics, caps, resumes often do.*

Make sure the resume is visually effective so that it communicates professionalism and clarity. Use capital letters, bold, underlining, and spacing to highlight your strongest credentials (unless the resume is being "scanned"). Do not make it too dense or busy and keep a consistent format throughout. Proofread your resume several times for spelling, grammar, and structure. Avoid acronyms and abbreviations in both.

3. *Vitas do not emphasize skills; resumes always emphasize skills.*

Emphasize prominent organizations with which you have been affiliated, functional skills, and special knowledge (computer languages, foreign languages, etc.) – especially those that directly match the job for which you are applying.

4. *The appearance of the vita is less important than the content; the visual appearance of the resume is very important.*

Type each resume and cover letter on matching paper in a visually professional format. Avoid acronyms and abbreviations.

5. *Your academic letter of inquiry for a job is sometimes addressed to an anonymous committee; other cover letters need to be addressed to the right person.*

Address your letter to a specific person, particularly the one most likely to make the hiring decision. This may require calling the organization, or searching the company's web site, to get the correct contact information.

6. *Cover letters for academic positions are often two pages in length; cover letters for other jobs are rarely longer than one page.*

Be concise and specific on your cover letter. It should not be any longer than one page. It is acceptable to repeat certain activities that you listed on your resume, but choose those that are most relevant to the employer. They are used as examples to display skills and attributes that will help you in your job.

7. *Academic positions require reference letters, other jobs often do not.*

Omit reference letters unless the employer specifically asks for them or is familiar with the actual reference person. When asked specifically for the names of references, you can then choose selectively from your list of possibilities and provide a reference list complete with contact information.

8. *Academic interviews last a full day; other interviews may last less than one hour.*

The first round non-academic interviews often last 30-60 minutes. You will need to be able to summarize concisely how your background fits the position. The best way to prepare for these interviews is to research the company or lab ahead of time and have a clear idea in your head where you fit within the company.

9. *The dress code for academic interviews can be informal; other interviews require appropriate business attire (suit, tie, or dark skirt, conservative colors, etc.)*

In a non-academic interview you are expected to dress conservatively and as if you were making a presentation to a senior manager or client.

Selected Alumni in Careers Outside of Academic Research and Teaching

<u>Job Title</u>	<u>Academic Field of Study</u>
	Humanities
Regional Director Archives of American Art	English
Administrator Waldorf School of Santa Barbara	German Studies
Intelligence Specialist Institute for Defense Analysis	Economics
Advertising Specialist Department of the U.S. Navy	Communications
Information Specialist, Manager Oracle Corporation	Music
	Social Sciences
Director of Research Los Angeles Zoo	Psychology
Project Manager Natural Resources Conservation Service	Human Ecology
President/CEO Espinosa Productions	Anthropology
SVP Portfolio Manager Oppenheimer Funds	Political Science
Senior Balkans Analyst U.S. European Command	Sociology
Analyst Allstate Research and Planning Center	Psychology
	Education
Program Director and Acting Dean Lincoln University	Education
President TVG (Educational Management Consulting)	Education
Administrator Public Performance Information Systems	Education
Consultant California Department of Education	Education
Director International Training Center of the ICO	Education

<u>Job Title</u>	<u>Academic Field of Study</u>
Executive Director Contra Costa Transportation Authority	Science Ecology
Senior Member, Executive Staff Computer Sciences Corporation	Physics
Consultant McKinsey and Company	Biochemistry
Life Sciences Practice Leader Ernst & Young, LLP	Biochemistry
Research Associate SLAC	Physics
Principle Editor UC Berkeley, College of Chemistry	Biophysics
Analyst The Boeing Co.	Engineering Electrical Engineering
Manager Shell E&P Technologies Company	Chemical Engineering
President/CEO Westt, Inc. (Management Consulting)	Mechanical Engineering
Group Leader Bombardier de Havilland	Aero/Astronautics
Consulting Engineer Haley & Aldrich	Civil Engineering
Chief of Propulsion Research and Technology NASA	Mechanical Engineering

Contrasting "Stereotypes"

In order to write an effective resume and cover letter, as well as to interview successfully, you may need to overcome the stereotype of being labeled as an academic. Consider the following "stereotypes" as you explore your career options.

According to business people, academics:

- are simple-minded about money
- are impractical about time
- value thought for thought's sake
- believe disorder fosters creativity
- are proudly unable to organize
- have no sense of deadlines
- are socially passive
- are intellectually aggressive
- are armchair liberals
- value ideals as absolutes

According to academics, business people:

- are mercenary
- are driven by time
- are not reflective
- lack creativity
- are slick and superficial
- have no sense of standards or ethics
- are socially aggressive
- are intellectually passive
- focus on petty details
- believe tradeoffs are always possible

Academia	Business
Work place (for tenured professors) artificial, stable secure, shielded from competition	real world, changing, risky subject to commercial forces
Attitude Toward Knowledge pursued for its own sake; goal: expertise	means to practical and organizational goals
Time and Information flexible deadlines	inflexible deadlines
Primary Interaction people and data/info.	people, importance of collaboration, trust, confidence
Primary Work Mode autonomy within organization	teamwork within organization
Personnel shared background/ values	enormous diversity; less emphasis on academic credentials

Used with permission from *Outside the Ivory Tower: A Guide for Academics Considering Alternative Careers* by Margaret Newhouse, Office of Career Services at Harvard University.

Job Search Strategy and Action Planning:

The Most Effective Job Search Technique: "Networking"

Individuals exploring career fields outside of academia have found the most important step in the process includes talking to successfully employed PhDs and other former graduate students who have made the transition to a new career. "Networking" is a sometimes overused term for contacting people informally in a career field or organization to ask for information. In a networking meeting, also called an "informational interview," you meet with a person who works in a field you are exploring to evaluate the fit between your skills, interests, and values and the position in which you are interested. It also helps you discover inside information about an organization's culture and expectations. This process will help you avoid making a poor match and may result in a positive mentoring relationship.

Steps to Conducting Successful Informational Interviews

1. Identify individuals who would be willing to meet with you for an informational interview. Friends, family, alumni, and others with whom you are familiar are a good place to start. Begin with the one person with whom you feel most comfortable speaking. This type of person will not mind if you are nervous or do not have your routine down to a tee. Many students use the Stanford Career Network (<http://www.stanfordalumni.org>) to contact Stanford alumni. When you contact alumni, be sure to mention how you found their name and why you are contacting them.
2. Research your contact's career field and organization. Information is available at the CDC and at various career exploration web sites.
3. Request advice, allowing your contact to be the expert. Ask open ended questions starting with "how," "what," and "in what ways . . ." to learn how they made their career decisions.
4. Bring your vita or resume and recap your skills, experience, and target employers. They may even be willing to offer resume/cv advice.
5. Develop specific questions tailored to your contact. Prepare this list ahead of time to ensure that all of your concerns are addressed.
6. Ask for referrals after you have established a relationship and developed rapport with her/him.
7. Always offer to pay for any coffee or meals.
8. Keep the meeting to a maximum of 30 minutes, unless your host volunteers more time. A telephone informational interview should not run beyond 15 minutes.
9. Upon first contact, set up a time to meet or call again instead of asking your questions right away. This will give you more time to talk, respects their time constraints, and allows you to build rapport.
10. Thank the person and keep him or her informed about your progress.

Tips on Getting Through to the Right Person

- When you call companies you have decided to target, ask for the name and title of the head of the specific department in which you would like to work.
- At this stage, you do not need to disclose any unnecessary information about why you are calling with people at the company who are answering the phone.
- If you try the right approach, you usually can find a way to connect with hard-to-reach managers. For example, if you get the receptionist, tell him or her: "It's regarding information I forwarded to her last week. I'm sure Mr./Ms. _____ will be familiar with it. Is Mr./Ms. _____ available?"

- If the person you are trying to reach is unavailable, ask the receptionist for the best time to call the following day.
- When you reach a hiring authority or another contact, if there is interest on their part, find out as much as you can about possible available positions and attempt to schedule an interview. If there is no interest on their part, ask them to keep your resume on file and request a referral to another hiring authority.

How to Set Up a Networking Meeting

Ideally, you should write an approach letter (no more than one page) to your contact introducing yourself and asking for a meeting. There is an example of this type of letter in the “Resumes and Cover Letters” handout at the CDC. Email may also be effective, but keep it professional and be clear in your purpose for writing to them. In addition, you can phone your contact directly. Informational interviews are far more effective when conducted in person rather than over the telephone. Do not expect your contact to call you back or to set up the meeting, you must initiate the call back and other arrangements.

Structure of an Actual Informational Interview

Stage 1: *Introduction* - indicate your appreciation for interviewee's time, introduce yourself, state how you got their contact information.

Stage 2: *Purpose* - review your purpose in asking for a meeting.

Stage 3: *Rapport Building* - ask your general questions allowing the interviewee to be the expert.

Stage 4: *Your Background* - briefly describe your background and current situation.

Stage 5: *Career Preparation/Opportunities* - ask questions about entering the field with your goals in mind.

Stage 6: *Ask for Referrals* - ask if they would be willing to refer you to others in this field.

Stage 7: *Acknowledgement* - thank the person for their time and interest.

Job Interviews

Interview Tips

- Research the organization, job, and career field using career directories, CDC resources, internet sites, and talk to people in your network about the company.
- Recall your past experiences and accomplishments.
- Review a list of typical interview questions (see below).
- Dress in appropriate business attire.
- Arrive at least ten minutes early for your interview.
- Make eye contact with people that greet you and have a firm handshake.
- Make polite conversation/chit chat at the very start of the interview, but remain professional.
- Do not apologize about or make reference to lack of experience or potential flaws.
- Be yourself, but always stress the positive (your interview may only last 30-60 minutes).
- Do not assume the employer has read your resume, come prepared with an extra copy.
- Do not ask about salary or benefits in the first interview

Common Interview Questions

1. Could you tell me something about yourself?

Provide a short two to four minute summary of your professional and/or academic background hitting the most relevant highlights. Conclude with a restatement of your objective.

2. Why are you interested in this position?

Provide a substantive answer with specifics based on the job and organization. It is also a good place to again address fit.

3. Why have you decided against a career in academia?

Focus on the positive qualities of your new career direction. You might mention that you enjoy "applied" work. Do not spend very much time discussing the negative side of the academic job market.

4. Could you tell me about your last job?

The emphasis here should be on transferable skills. A useful approach to answering this question is called the **STAR** model: describe the **Situation**: explain your previous organization; **Task**: describe the department or team with whom you worked; **Action**: describe what you did emphasizing skills; and **Results**: describe what you accomplished. It is a good idea to avoid focusing on the negative aspects of your previous positions.

5. What would you describe as a weakness?

You need to come up with an answer because you will come across as arrogant if you say you cannot think of anything. "I'm a perfectionist" has been overused. The best answer is to be honest about a relatively minor weakness that would not be terrible in the job and then restate ways in which you compensate for it. Or, restate your positive traits afterward.

6. What are your future goals?

This is no longer as critical a question as people change jobs more frequently than in the past. It is best to mention that the job you are interviewing for appears to fit your plans well. Feel free to give examples of ways in which you are a good fit at this time.

7. Do you have any questions for us?

Do ask them questions. Stating that you have none implies disinterest in the company or job. Do not ask about salary or benefits. Ask questions that have to do with the day-to-day functioning in the job. For example, "Could you give me an idea of a possible project I would be involved in which I would be involved within the first few months on the job?"

Career Fields By Skills

CAREER FIELD(TOP) SKILLS (SIDE)	Business & High Tech	Media	Education	Non-Profit	Public Policy
Research & Analysis	R&D, risk analysis, Market research, consulting	journalism, market research	research centers educational research & evaluation, archival work	research efforts, think tanks, research centers, foundations	government research, state & local agencies
Teaching	sales, training, development	sales, radio/ TV, advertising, journalism	teaching, freelance, lecturing	public education, development, community organizing	politics, executive branch, fundraising, interest groups
Writing & Communication	corporate communications, communications analysis, PR, advertsing	journalism, writing, editing, publishing, PR, advertising	publishing (educational), reporting, writing	PR, newsletter & publications editing	speech & report writing
Administration & Management	management positions, consulting	editing, publishing, corporate publications, management	academic administration (college dean, school principal)	event planning, foundation management	program management, agency administration
Problem Solving	consulting, marketing, management	investigative reporting, PR, management, specialty consulting	academic administration, educational consulting	management, nonprofit consulting, think tanks	government positions, policy research, political consulting
People Skills	consulting, marketing, management	sales/ marketing in publishing, interviewing	student services (counseling, administration)	development, management, advocacy	politics, (candidate or staff), fundraising, lobbying
Technical & Scientific Skills	info. systems, R&D, CAD, actuarial consultant	specialty publishing, professional journals, tech. writing	computers in education, curriculum development	R&D, consulting for hospitals, info. systems, environmental groups	national labs, EPA, Census, NSF, NIH, OTS, int'l scientific agencies
International Expertise	cultural consulting, risk analysis, int'l business	int'l media, specialty publishing	int'l education, curriculum development, educational tours	int'l consulting & orgs.	Peace Corps, int'l orgs & agencies, policy think tanks
Arts & Other Creative Skills	advertising, computer music, graphics	criticism, writing, art, illustration	art education	museums, music therapy, arts orgs.	administration of arts agencies

CDC Handouts and Programs for Ph.D. Students

Handouts

Resumes and Cover Letters
CV's and Cover Letters
Dossier Preparation: Teaching Portfolios and Teaching/Research/Personal Statements
Internet Resources
Community College Careers
Academic Job Search
Networking
Interviewing

Programs

Ph.D. Pathways Series (Spring Quarter)
Women at Work Series (Winter Quarter)
Academic Job Search Series (Fall Quarter)
Networking

Additional Resources at the CDC

Career Counseling
Assessments (Myers-Briggs Type Indicator, Strong Interest Inventory, Campbell Interest and Skill Inventory, SkillScan, and Values Inventory)
Career Resource Center (books, magazines, job listings, resume/cv/cover letter binders, company directories)
Reference File Service
Cardinal Recruiting

To schedule an appointment, call: (650) 723-3963