Using Resources at Cornell to Investigate Careers in the Life Sciences

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No matter where you are at in your Cornell experience, you should start thinking about your career.
Non-Academic jobs

- Educational Institution:
  - Alumni office
  - Grants and contracts
  - Public relations

- Business and Industry:
  - Consulting companies
  - Manufacturing
  - Financial institutions
  - Media outlets

- Not-for-profit organization:
  - Libraries
  - Museums
  - Professional societies

- Government:
  - Federal
  - State
  - Local
Career Advising Resources

Faculty Position

Meet with your special committee members
Look for programming from:
- Center for Teaching Excellence
- CU-CIRTL

Postdoctoral Position

Christine Holmes,
Director of Postdoctoral Studies
Caldwell Hall
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Non-Academic Position

CALS
140 Roberts
Engineering
201 Carpenter
University-Wide
103 Barnes
Presentation Goals

- Normalize careers outside of academia
- Present a process for how you can take ownership of your career outside academia
- Describe resources available at Cornell to help with your career exploration
Post-Training Workforce of US-Trained Biomedical PhDs

- Unemployed: 0%
- Non-science: 5%
- Science-related, non-research: 10%
- Government research: 15%
- Industrial research: 20%
- Non-tenure-track academic research/teaching: 20%
- Tenure-track academic position: 25%
Cornell Student Career Outcomes*

* 175 graduate students from all fields who completed training in GGD Laboratories (2001-2011)
Reasons to Stay in Academia (Even If You Don’t Want To!)

• Your graduate degree will be “wasted”
• Your advisor won’t support you if you leave academia
• You’re a failure if you leave academia
• Your personal beliefs conflict with the corporate world
• You don’t know what’s out there
• You’re afraid of making a career change
• You don’t have any transferable skills
• Nobody will hire a PhD anyway
• You don’t have time to look for a job
• You’re over- and under-qualified for non-academic jobs
• You can’t ever come back to academia once you leave it
How Can You Overcome These Challenges?

Treat your career exploration as another research project
Your Graduate Experience Already Taught You How To:

- Define a topic of interest by reading extensively
- Formulate a hypothesis or question
- Figure out what you know and don’t know
- Identify resources (books, websites, databases)
- Talk to experts intelligently
- Question your assumptions

Why not use this same approach to discover how you fit into the world outside academia?
Your Career Exploration Research Project

Conduct background research to identify topics of interest

Identify your skills and what is important to you in your career

Develop a hypothesis or question

Gather information to test your hypothesis or answer your question

Evaluate your findings

Articulate your results and publicize
Your Career Exploration Research Project

1. Conduct background research to identify topics of interest

2. Develop a hypothesis or question
   
   E.g. “I would like to use negotiation skills in my future career” or “Is consulting a good match for my skills and interests?”

3. Gather information to test your hypothesis or answer your question

4. Evaluate your findings

5. Articulate your results and publicize
Your Career Exploration Research Project

1. Conduct background research to identify topics of interest
2. Develop a hypothesis or question
3. Gather information to test your hypothesis or answer your question
   - Locate resources, read, and speak to experts to learn about careers in which you could use certain skills and fulfill your priorities
4. Evaluate your findings
5. Articulate your results and publicize
Your Career Exploration Research Project

1. Conduct background research to identify topics of interest
2. Develop a hypothesis or question
3. Gather information to test your hypothesis or answer your question
4. Evaluate your findings
   - Prove your hypothesis or answer your question by processing the information you found. Are any careers a good fit for your skills, interests, and values?
5. Articulate your results and publicize
Your Career Exploration Research Project

1. Conduct background research to identify topics of interest
2. Develop a hypothesis or question
3. Gather information to test your hypothesis or answer your question
4. Evaluate your findings
5. Articulate your results and publicize

*Apply for jobs!*
When Should You Start This Project?
The Career Exploration Process

- Understand Yourself
  - Interests
  - Values
  - Strengths
  - Goals

- Develop Your Focus

- Explore Options
  - Resources
  - Networking
  - Activities
  - Internships

- Take Action
  - Applications
  - Letters
  - Resumes
  - Interviews
Beginning of Your PhD Program

- Selecting projects
- Selecting advisor and special committee members
- Identifying grants/fellowships
- Taking courses
- Engaging in extracurricular activities
- Identifying skills or interests you’d like to develop further
Middle of Your PhD Program

- Finding internships or research collaborations
- Meeting people with interesting careers
- Identifying organizations
- Attending career fair to meet employers
- Networking at conferences
- Participating in workshops, extracurricular activities
- Conducting informational interviews
12-18 Months Before Graduation

Clarify the jobs you’d like to apply for by:

- Talking people at organizations of interest
- Doing an internship or job shadowing experience
- Conducting online research
- Attending career fairs and employer info sessions
3-6 Months Before Graduation

Identify jobs you’d like to apply for and:

- Develop resume
- Create a cover letter
- Practice interviewing (phone/Skype and in-person)
Why Should You Spend Time Understanding Yourself?
Understand Yourself

Values

Strengths

Interests

What is the intersection for you?
Redefining Yourself

Academia:  
Job title (Professor)  
Subjects (Animal Science)

Outside of Academia  
What you’ve done and could do  
(trasferable skills)

This may be why you feel as though you don’t fit anywhere but in academia
Why Do You Have to Redefine Yourself?

% of people in US over age 25 with...

- High school degree: 87.6%
- Bachelor’s degree: 30.9%
- Master’s degree: 8.0%
- Professional degree (MD, JD, DDS) degree: 1.5%
- Doctoral degree: 1.6%

http://www.census.gov/hhes/socdemo/education/data/cps/2012/tables.html
I am getting my PhD in cell biology.

I am skilled at writing, researching a wide variety of topics, reading and synthesizing large amounts of information, and working independently in high-pressure environments.

Tenure-track or adjunct professor
High-school teacher
Industry researcher

Journalist
Grant officer
Editor
Government job: patent reviewer, speech writer, foreign service officer
Cornellians with Life Science PhDs Who Have Redefined Themselves

Deputy Director of Forensic Biology, NYC Chief Medical Examiner’s Office

Program Director, National Cancer Institute

Director of Biostatistics, Johnson & Johnson

Patent Agent, Browdy & Neimark

Freelance Science Writer/Editor

Director of Discovery and Development Research, Elanco Animal Health

Senior Scientist, GlaxoSmithKline Pharmaceuticals
How Can You Redefine Yourself?
Identifying Your Transferable Skills

1) Using the skills handout, check off all of the skills in which you are highly or moderately proficient
   Note: If you possess skills not listed, add them to the list.

2) Put a check next to those highly proficient or moderately proficient skills you enjoy using the most.
Connecting Your Skills To Careers

- Write your ideal job description featuring the skills you most want to use in your daily work.

- How compatible are the skills you most prefer to use with the career you are currently contemplating?

- What additional careers might align with the skills you most want to use?
What Careers Might Use These Skills?

O*NET
Detailed job descriptions provided by the U.S. Department of Labor which include:
Tasks, Skills, Abilities, Knowledge/Education

http://www.onetonline.org/skills/
Resources: Exploring Careers Outside of Academia
What Are Your Questions?