

Taking Your Passion for Science to a Career Away from the Bench

Brianna Blaser, PhD, AAAS/*Science* Careers
Richard Weibl, Center for Careers, AAAS

AAAS

- International nonprofit organization dedicated to advancing science, engineering, and innovation throughout the world
- Global, membership-based organization
- Publisher of *Science*
- Science and Technology Policy Programs
- Science Education Programs
- Source for broad range of career advice and resources through *Science Careers*

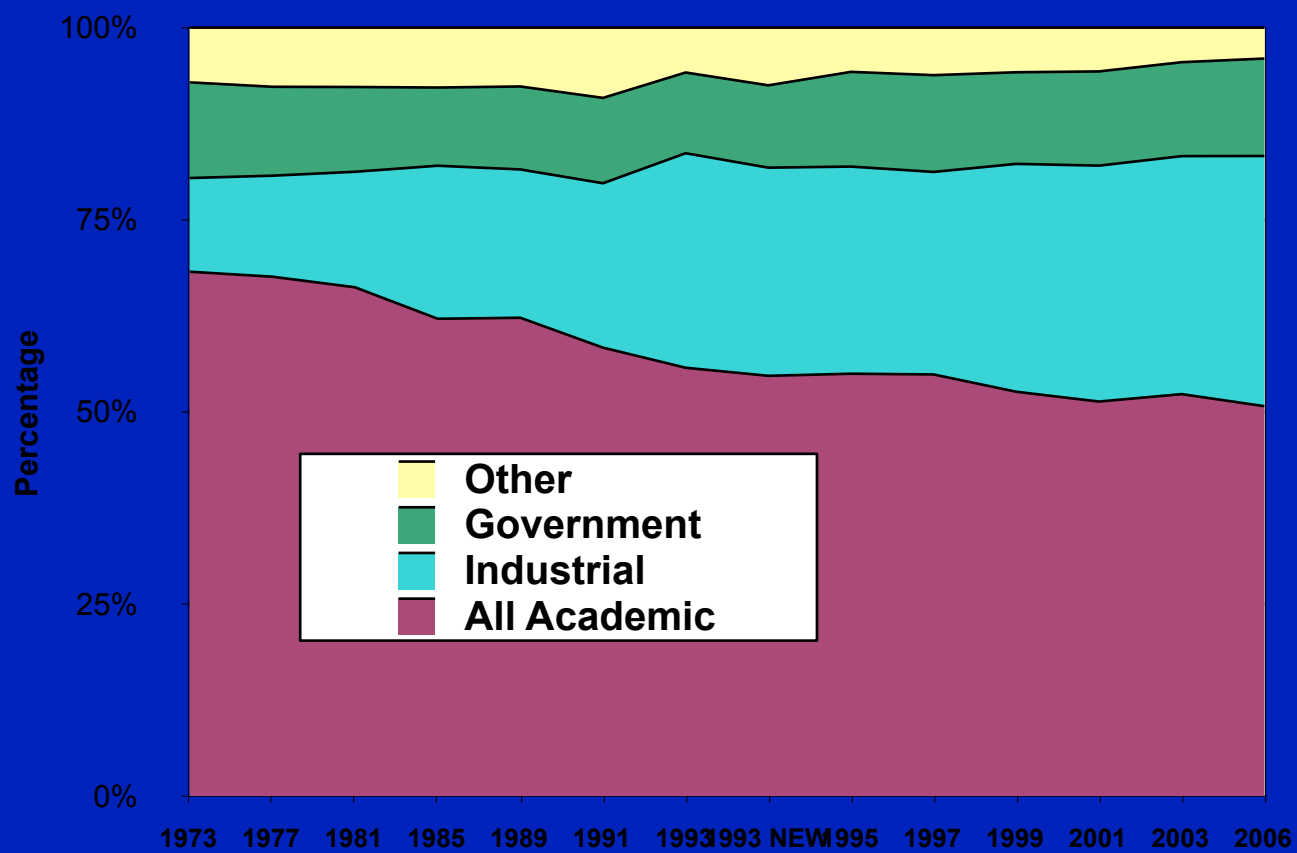
Young people themselves don't realize how valuable they are with a PhD. It means an ability to think deeply, solve problems, analyze data, criticize, and be criticized. PhDs often don't realize the breadth of what they are capable of doing.

- Neal Lane, Science Advisor to Bill Clinton

Introduction

- Are these careers “alternative”?
- What sorts of opportunities are there?
- How do you decide what to do?
- How do you get there?

Distribution of Biomedical Science PhDs by Sector of Employment



Source: Federation of American Societies for Experimental Biology

Academic Career Options

Primary, Elementary, and Secondary School

- Teaching, Administration, Curriculum Development

School System Administration

- Curriculum and Instructional Development
- Research, Evaluation and Program Administration

Colleges, Universities, Research Institutes

- Traditional Faculty Career
- Program Administration
- Curriculum and Instructional Development
- Research and Grant Administration

Myths About Non-academic Careers:

- No one will hire you. You have no useful skills.
- Your research skills are your most valuable asset.
- People who work in business or government are stupid and boring.
- Jobs in the business and government are stupid and boring.

Adapted from Susan Basalla and Maggie Debelius' *"So What Are You Going to Do With That?" Finding Careers Outside Academia*

Corporate / Private Sector Options

- Industrial Research and Development
- Consulting
- Investment & Finance
- Intellectual & Property Law
- Science Writing & Journalism
- Editing & Publishing
- Sales, Marketing, Product Support
- Human Resources

Sales

- Continue to work with science and scientists
- Work with customer before and after sales occur
- Requires good people skills



Marta Fernandez
Applied Biosystems

Non-Profit / NGO Sector Options

- Research & Evaluation
- Scientific Regulation & Monitoring
- Public Policy Advocacy
- Program Administration
- Leadership & Management
- Science Writing & Journalism
- Editing & Publishing
- Public Education

Science Writing

- Work in one of many settings
- Write on various topics
- Need strong writing skills
- Training programs, internships, volunteer



Kara Nyberg
Freelance writer

Government Sector Options

- Patent Examination
- Scientific Regulation
- Public Policy
- Program Administration
- Agency Leadership & Management
- EU Bologna Process
- Ministry of Education and Research

Science Policy

- Work on government policies that intersect with science
- Bridge between the policy world and scientists
- Communication skills are key
- Fellowships to enter the field



Winston Yu
World Bank

Patent Agent/Attorney

- Advise companies and inventors on intellectual property and patent issues
- No degree necessary
- Strong communication skills



James Dilmore
Reed Smith

Many Variations Between Sectors

- Wages and Benefits
- Work/life Balance
- Focus of Daily Duties
- Education and Training Expectations
- Different Career Paths
- Relationships to Colleagues

What career path is right for you?



Self-Assessment, Exploration, and Integration

- Research your options
- Reflect on your preferences
- Conduct informational interviews
- Network

Research Your Options

Read about career paths

- *Science Careers* – articles and forum
- *Alternative Careers in Science* – Robbins-Roth
- *Put Your Science to Work* - Fiske
- *So What Are You Going to Do With That?* – Basalla & Debelius
- *Nontraditional Careers for Chemists* – Balbes

Talk to Career Services professionals

Talk to people in the field – The Information Interview

The Informational Interview

- Ask for a few minutes of the person's time
- Prepare ahead of time
- Ask open-ended questions
- Mind your manners
- Ask for referrals
- Afterwards, write a thank you note

Still more questions to ask

- What attracted you to this field?
- What do you like most or least about a position or field?
- Describe a typical day or week.
- What steps did you take to break into this field?
- What skills are most helpful in your job? How can I develop them?
- To what professional associations do you belong?
- How do I locate positions in this field?
- What advice do you have for me?

Reflect on Your Preferences

- Take career inventories and self-assessments
- Reflect on preferences
 - Journal – ponder the questions
 - Pro and con lists
 - Skill Inventory – strong or need to acquire
 - Lifestyle values

Skills You Have

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- Data analysis and management
- Project management
- Communication
- Computer and technical operations
- Teaching and leadership
- Teamwork
- Problem-solving and critical thinking
- Technical knowledge

Consider that the average person sleeps 8 hours per day; that leaves 16 hours for other activities. From the time that we are roughly five years old through the time we retire in our 60s or beyond, most of us are involved in vocational activities – educational and work – one-half or more of those remaining hours, 5 days per week. If you are unfulfilled in your work life, your dissatisfaction will certainly affect other areas of your life.

- Michael Shahnasarian, *Decision Time: A Guide to Career Enhancement*

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- How often do you want to change projects?
- Would you like to work independently or as part of a team?

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- Who do you know who likes their job?

Grand Considerations








- Employment trends
- Societal needs
- Economic conditions
- Family responsibilities
- Geographic considerations
- Immigration issues

Skills Employers Want


- Learning to learn
- Reading, writing, and computation
- Communication
- Adaptability
- Personal management
- Group effectiveness
- Leadership

Building and Working Your Network

- Ask your contacts about career options
- Social networking
- Career fairs
- Meetings and conferences
- Mentoring programs

-  Home
-  Groups
-  Profile
 - Edit My Profile
 - View My Profile
-  Recommendations
-  Contacts
-  Inbox
-  Applications

Add Connections



Brianna Blaser

Project Director, Outreach at Science Careers/AAAS

What are you working on?

Your profile is 80% complete [Edit]

Profile

Edit My Profile
View My Profile
Edit Public Profile Settings

Brianna Blaser you

Project Director, Outreach at Science Careers/AAAS
Washington D.C. Metro Area | Professional Training & Coaching



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Past	<ul style="list-style-type: none"> • Center for Workforce Development Research Assistant at University of Washington • Women Studies TA at University of Washington • Intern at Association for Women in Science see all...
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Connections	72 connections
Websites	<ul style="list-style-type: none"> • My Company
Public Profile	http://www.linkedin.com/pub/brianna-blaser/6/6a5/855

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Summary

Brianna Blaser is Project Director of Outreach for AAAS & Science Careers where she promotes Science Careers resources through career and professional development workshops to undergraduate and graduate students, postdoctoral scholars, and early career scientists.

Brianna earned her PhD in Women's Studies at the University of Washington in 2008. Her dissertation, *More than Just Lab Partners: Women Scientists and Engineers Married to and Partnered with Other Scientists and Engineers*, examined how women scientists' relationships with other scientists affect both their professional and personal lives. While at the University of Washington, Brianna was a research assistant at the Center for Workforce Development where she organized professional development activities, including a newsletter, a mentoring program, and workshops for

Brianna's Activity edit

Friday, Aug 7

Brianna Blaser has an updated profile (Interests, Associations, Honors) 12 days ago

[See more >](#)

Your private info about Brianna

Email & Phone:

bblaser@aaas.org other primary

Develop New Skills

You might need experience in new arenas!

- Volunteer
- Complete an internship
- Pursue fellowships
- Get additional training
- Take a part-time or temporary job
- Take some additional courses

Demonstrate your interest in your new career path

But what will my advisor think?

- Your career path is about YOU
- You are not the only one to doubt the academic/
research path
- Be honest about your concerns
- Many experience relief

Changing careers is not a failure; it often requires more courage than continuing in the expected direction and can lead to much greater personal development.

- Anita Crafts-Lighty

Resources

Available at sciencecareers.org/outreach

- These slides

Available at sciencecareers.org/webinar

- Nontraditional Careers webinar

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