



Career Basics
Advice and Resources for Scientists
From Science Careers

FREE DOWNLOAD

The Essential Careers Guide

INTERVIEW ADVICE • NETWORKING • GRANT WRITING
and more, brought to you by *Science Careers* and *On Assignment*



Science Careers
From the journal *Science* AAAS



- Magazine
- News
- Signaling
- Careers
- Multimedia
- Collections

Science Careers From the journal Science

- Jobs
- Funding
- Meetings and Events
- Career Development
- For Advertisers
- About Science Careers

[Science Home](#) > [Science Careers](#) > [Career Development](#) > [Previous Issues](#) > [2008](#) > [2008-03-28](#) > [Gosling](#)

CAREER DEVELOPMENT : ARTICLES

-  [E-Mail This Article](#)
-  [Print This Article](#)
-  [Share This](#)
-  [Related Articles](#)



Mastering Your Ph.D.: Goodbye to All That

Patricia Gosling, Bart Noordam
Germany
28 March 2008

Let's say you've mapped out your potential career options, explored various opportunities, and have decided that a career as a researcher, either within or outside academia, isn't for you. Leaving the lab may not be easy, but when you've decided to say goodbye to the bench, rest assured that plenty of opportunities await.

This month, we focus on some of the issues you'll face in finding jobs outside the lab and in becoming part of a new work culture, whether it's in a company, a consulting firm, a nonprofit organization, or the public sector.

THE BIG DECISION

Saying goodbye to lab work can be a scary prospect. After all, you've been working in a lab for years, and you may wonder if you're even qualified to do anything else. Then there's the emotional fallout. It will be hard to announce that

you're walking away from research to do something unrelated or only loosely related to your field. And it may be hard to ignore the voice in your head that keeps you awake at night: Have all those years spent synthesizing chiral compounds or isolating DNA added up to nothing?

Silence the voice in your head by reminding yourself of the numerous rewarding careers you have the freedom to pursue now that you've decided to leave the lab. These jobs need your expertise and may even make use of the skills you learned at the lab bench.

LANDING A JOB

As you look beyond the lab-work horizon, take your time and, if necessary, talk to a career counselor to help you narrow down the dizzying number of options you can pursue. When you've identified the type of job you want, you need to focus on the skills that make you an attractive candidate.

When drafting your curriculum vitae (CV) or presenting yourself in an interview, be sure to

BUSINESS OFFICE FEATURES

A Boost for Vaccine Research
28 March 2008

EXODUS TO ASIA: Research Opportunities Abound
21 March 2008

Drug Discovery and Development: A Complex Team Sport
7 March 2008

[More](#)

CAREER TOOLS AND RESOURCES

Current Employers

Learn more about the employers advertising positions on our site.

Science Careers Forum

Post a question, get an answer on our online community

Graduate Programs

Browse our database of program profiles

How-To Guides

- Writing a resume/CV
- Beating the interview
- Getting funding
- Managing a lab and staff

focus on the skills that are relevant for the job. If you're going into finance, for example, highlight your excellent analytical and computer-programming skills. If you're applying for a nonresearch position in the pharmaceutical industry, shine the spotlight on your time-management and project-management skills. It may help to put yourself in the employer's shoes and imagine what you would look for if the situation were reversed. In brief:

- Focus on your transferable skills (oral and written communication skills, time and project management, teaching and mentoring, analytical skills, problem-solving skills, flexibility, and dedication).
- Highlight your willingness to learn and the fact that you're a self-starter. Give some examples of your ability to be a good team player.
- Downplay the specifics of your thesis--they won't be relevant in a job outside the lab. Instead, focus on the general aspects: how writing a thesis demonstrates your ability to complete a large, self-directed project. Also, focus on career goals and the contribution you can make to the hiring organization.
- Talk about leaving the lab as a positive rather than a negative experience. Don't say, for example, "Well, I would rather have gone into academia, but there aren't enough jobs, so here I am." Instead, say something such as, "I enjoyed doing research, but now I'm seeking a new challenge that will allow me to use the many skills I mastered as a graduate student."

Be sure to thoroughly research the organization you're applying to and consider professional help to draft your CV (or résumé, as short-form CVs are called in the United States). The format of your CV will certainly be different if you were pursuing a position in academia--and formats vary by field, industry, and country. At the very least, ask a trusted friend or colleague who works outside academia to review it.

CULTURE SHOCK

You've landed a job you're excited about. Congratulations! But be prepared for culture shock: Moving from the lab to an office environment can feel very much like moving to a foreign country. In the lab, you most likely were the master of your domain--or, at least, of your lab bench. It's likely that your passion and scientific curiosity provided the drive to produce. Although you had to report your progress to your supervisor, you were probably left alone most of the time to get on with your work. And there was a specific reward at the end: your Ph.D.

In a nonacademic setting such as a private company, you will be confronted with very different expectations. Although it may have been okay to be a maverick in the lab, corporate culture often thrives on a spirit of team building and adhering to specific corporate values. Everything from how you act to the hours you work to how you dress may be a radical turn around from what you're used to. You may be working under a strict chain of command in which you report to one or more superiors, whose own performance may be judged on how well you perform.

After years of freedom to move around different work stations in the lab and come and go as you please, you may find yourself sitting at a desk and staring at a computer screen for most, if not all, of your day. This will be a change of pace, too, and you may have to find ways to adjust, such as taking breaks to walk around and get some fresh air.

On the professional front, be prepared to accept the reality that projects, workloads, and timelines are often very "top down." Important decisions are made higher up, and you, the worker, are expected to carry them out. You may be asked to stop working on a project you find enjoyable when management deems it no longer profitable. You may find yourself needing to learn one or several new skills, and you'll probably spend a lot of time in meetings.

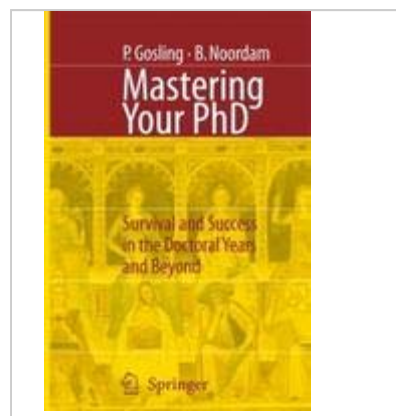
[Building your network](#)

Salary Tools

[Find out how much you're worth with our salary calculator](#)

[To Advertise](#)

[Find Products](#)



SETTLING IN

As you settle in to your job, take your cue from your colleagues. You may have been at the top of your game when you were awarded your Ph.D., but you'll be the new kid on the block, so it's best to listen and learn from the people around you. Develop your skills as a team player and be cautious and diplomatic when suggesting new ideas. No one likes a pushy know-it-all. Keep in mind that the bottom line, not employee satisfaction or innovation, will drive most of your company's decisions. In the academy, free expression is usually encouraged, even to the point of rudeness. Be aware that diplomacy and polite conversation may be the norm in your new workplace, so be prepared to follow suit.

Show your flexibility by volunteering for projects others may not want to do. You will gain insight into the full scope of your new position and develop strengths you might not know you have.

Finally, take full advantage of any perks, such as your company's professional-development program.

Sign up for courses and additional training in areas you may be weak in. Learn a new language, new computer skills, meeting skills, or better ways to manage your time. In no time at all, the skills you learned in the lab will be transformed into practical assets you'll take with you as you move through the working world. And wherever your career takes you, remember that planning and communication are essential for success in any field.

What you end up doing may have only a faint relevance to your Ph.D. work, if any, so embrace the upsides of your new job and downplay the negatives. Everybody needs time to adjust. New opportunities offer new and unexpected rewards. Learning to survive and thrive when you are pulled out of your comfort zone is an experience that will benefit you for the rest of your life. So, set sail for far horizons and be fearless about the unknown world ahead.

<p>Patricia Gosling and Bart Noordam are the authors of <i>Mastering Your Ph.D.: Survival and Success in the Doctoral Years and Beyond</i> (Springer, 2006). Gosling is a senior medical writer at Novartis Vaccines and Diagnostics in Germany and freelance science writer. Noordam is a professor of physics at the University of Amsterdam, the Netherlands, and director of development and engineering at ASML. He has also worked for McKinsey and Co.</p>	<p>Comments, suggestions? Please send your feedback to our editor.</p>
<p>Images. Top: Christopher Matson. Middle: courtesy, Springer</p>	<p>DOI: 10.1126/science.caredit.a0800045</p>

RELATED CONTENT

Mastering Your Ph.D. - Series Index
10 November 2006,

Reality Check: U.K. Report Reveals Variety of Career Paths for Ph.D.s
19 October 2007,

Hidden Talents, Hungry Markets: Ph.D.s Have Many Skills to Offer Industry
8 June 2007,

CVs for Postdocs Leaving Academia
23 January 2004,

Tooling Up: Breaking Free of Academia (A Test and a Quiz)

21 March 2008,

Across the Road from the Ivory Tower

22 April 2005,

 [E-Mail This Article](#)  [Print This Article](#)  [Share This](#)  [Related Articles](#)

[Magazine](#) | [News](#) | [Signaling](#) | [Careers](#) | [Multimedia](#) | [Collections](#) | [Help](#) | [Site Map](#) | [RSS](#)
[Subscribe](#) | [Feedback](#) | [Privacy / Legal](#) | [About Us](#) | [Advertise With Us](#) | [Contact Us](#)

© 2008 American Association for the Advancement of Science. All Rights Reserved.
AAAS is a partner of HINARI, AGORA, PatientInform, CrossRef, and COUNTER.