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# Job Squeeze Vexes Postdocs

Postdocs are finding it harder to land academic positions, forcing them to take multiple postdocs, or leave academia for just-as-hard-to-find industry jobs.

• *Alex Philippidis*



You've studied. You've written. You've defended. You've celebrated. Now what? [© Tom Wang - Fotolia.com]

Every six months, Cara Altimus, Ph.D., asks herself: Am I making progress? Is what I'm doing relevant? Am I likely to get a job one day?

Eighteen months into a five-year postdoctoral position in the lab of David Foster, Ph.D., assistant professor of neuroscience at Johns Hopkins University School of Medicine, Dr. Altimus has reason for concern. Postdocs are finding it harder to land academic positions, forcing them to take multiple postdocs, or leave academia for just-as-hard-to-find industry jobs.

Dr. Altimus' research examines reactivation of previous spatial experience, believed to be a memory trace, by recording large populations of neurons in the rodent brain. She isn't actively seeking an industry job and isn't open to doing a second postdoc.

"I try to keep myself open to other opportunities and continue networking, so that I at least know what jobs other Ph.D.s are getting, and keeping up with these people," Dr. Altimus told GEN.

Dr. Altimus is among thousands of biopharma postdocs uneasy about their post-postdoc futures—35,000 as of 2009, according to NSF. Data is often several years old, as NIH's Biomedical Research Workforce Working Group found to its frustration.

In a report issued June 14, the panel called in part for NIH-funded institutions to collect data on the career outcomes of grad students and postdocs. The task force also recommended shifting NIH postdoc funding from research project grants to training grants and fellowships, and allowing institutions to provide additional training and career development while testing ways to shorten the Ph.D.

training period. Funding for those and other recommendations will likely prove elusive. NIH is facing a flat budget for FY 2013. Whoever wins the presidential election will be scrambling to fulfill promises to contain spending.

“The system has strong incentives to train people, particularly when the amount of grant funding grows, because faculty have strong incentives to staff their labs with postdocs and graduate students,” Paula E. Stephan, Ph.D., professor of economics at Georgia State University and a research associate at the National Bureau of Economic Research, told GEN. “One, they’re young, and they’re full of good ideas, we think. Two, they’re very flexible, and they’re willing to work real long hours. And three, they’re cheap.”

Dr. Stephan said she’d like more research shifted to research institutes from universities: “You cannot train people without doing research, but you can do research without producing a lot more postdocs and graduate students.”

While the number of life-sci doctorates more than doubled between 1978 and 2008 (from 5,086 to 11,088), so too did the percentage of life sciences doctorates awarded to non-U.S. citizens or permanent residents (from 15.6% to 34.4%). There’s not enough research to say how much that may have squeezed the job supply for U.S.-born postdocs, along with the move of R&D to China and India.

Cathee Johnson Phillips, executive director of the National Postdoctoral Association, said several factors explain the job squeeze: Universities are producing more Ph.D.s, more of whom are taking postdoc positions—often two or more. The number of Ph.D.s landing tenure-track jobs has held steady or dipped. And grad students traditionally shun nonacademic employment.

One nonacademic career option is Washington policy work, for agencies like NIH or FDA, or groups like AAAS. Another option is consulting. Firms like McKinsey, BCG, and Bain recruit at top-tier schools. The pay well exceeds the \$41,000 median annual salary of life-sci academic postdocs, or the \$47,000 median of nonacademic postdocs, according to 2008 NSF data.

“They pay you \$120,000, \$130,000 right off the bat,” Thihaan R. Padukkavidana, Ph.D., co-founder and president of the Career Network for Science Ph.D.s at Yale, told GEN. “Why do they want these Ph.D.s? They can sell this. They say, ‘We’ve got 20 Ph.D.s working on your project.’”

Connecting postdocs with nonacademic careers is also a focus of the Johns Hopkins Postdoctoral Association’s “80/20” program—while 80% pursue academic careers, only 20% land jobs.

“What postdocs don’t realize is that by applying online, they will never get the job. It’s the networking that will get them the job. We hear about postdocs that have been applying for even three years and they haven’t heard anything back,” Maria Sevdali, Ph.D., who runs 80/20 and is a postdoctoral fellow in Hopkins’ Department of Molecular Biology and Genetics, told GEN.

Yet few postdocs, Dr. Sevdali said, attend association networking events: “Where are the postdocs? They’re not there networking. Then their contract is going to run out, and they’re going to freak out if they cannot find a job.”

Dr. Altimus, the association’s incoming co-president, said the job squeeze has lowered expectations among postdocs since she began Ph.D. studies in 2005.

“When you talk to postdocs, it’s always like, ‘If I get a job this year,’ ‘If this were published,’ and ‘I sure need to get an academic job,’” she said. “It’s not fair to say that’s just an academic problem. The whole country—the whole world—seems to be in a recession.”

## **If you are a life science grad student or post doc who does not intend to work in academia, which of the following career fields is most appealing to you?**

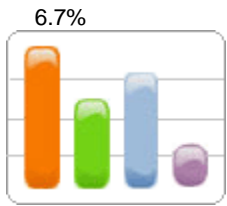
Biotech and Pharma Industry

65.4%  
Consulting

12.8%  
Government

9.4%  
Tech Transfer

5.7%  
Science Writing and Publishing



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