

International postdocs

Every year, thousands of researchers head for the US National Institutes of Health. But what draws them there?

Karen Kreeger

The US National Institutes of Health (NIH) in Bethesda, Maryland, at the start of the 21st century could be considered the biomedical equivalent of Ellis Island at the turn of the twentieth—a staging ground for people seeking their fortune in the New World. In 2000 alone, 2,500 researchers from 90 countries spent time there as visiting fellows.

This group mirrors the aspirations of the international postdoc community at large. Postdocs generally come to the NIH to learn new techniques, gain access to better research opportunities, or to work with a particular mentor. But the decision also reflects the conditions in his or her home country, such as a lack of opportunities or resources. And those conditions make his or her next decision—looking for a foothold in the North American job market or finding a permanent position back home—that much more crucial.

Classic path

Jacqueline Wood came from Britain to the NIH because she heeded the classic advice of picking the best lab and mentor to suit her interests. “I looked to see who was doing what I wanted to do,” Wood says. She found Jordan Grafman at the National Institute of Neurological Disorders and Stroke.

It helped that the NIH had equipment that allowed her to pursue her interest in using functional magnetic resonance imaging to study information storage in the brain’s prefrontal cortex and its effects on behavior. She says that getting a postdoc position in Britain that provides access to such equipment is difficult—especially if you have not done much imaging work before and if your work is not directly clinical.

After her three-year NIH postdoc, Wood must return to Britain because of the provisions of her visa. She says that there are reasons both for wanting to return home and for trying to stay on in the US. She cites the greater number of funding opportunities in the US as a big draw.

There is also “less of a glass ceiling for women in science here in terms of research and salary,” she says. “Also I’m married, and the impression I get is that it’s much easier to

solve the ‘two-body problem’ here.” Wood’s husband, Peter Brasted, is a postdoc at the National Institute of Mental Health.

Family reasons would take her back to the UK, she says, although jobs and funding might not be as easy to find as in the US. But Britain has a strong research base in cognitive psychology, so jobs and funding in this field may improve, she thinks—but perhaps not enough to keep her there. “I certainly would go back, and then look to return to the US because of the facilities and funding,” Wood says.

Point of no return

Herminia Gonzalez, a Spanish postdoc at the National Heart, Lung, and Blood Institute, had similar reasons for seeking out an NIH postdoc. But she has different prospects for returning home after she finishes working in the labs of Bryan Brewer and Silvia Santamarina-Fojo in the Molecular Disease Branch on animal models of cardiovascular diseases and heart attacks.

Gonzalez would definitely like to return to Spain, but says that is a “difficult thing.” There are not many possibilities for a permanent research position in Spain, she says. In the past, one possibility was to teach at a public university and do some part-time research, but this avenue has all but dried up. The other prospect she mentions is to work at public institutions, but jobs there are also “very limited and competitive,” says Gonzalez.

To alleviate this bottleneck, the Spanish government last year created “Ramon y Cajal” five-year contracts (500 this year) to be offered to PhDs, whether Spanish natives or not, in all of the physical and biological sciences (see *Nature* 410, 1014, 2001). Scientists who win a contract work within established groups at universities or public research ministries.

But even these positions don’t guarantee security. “After the five years nobody knows if the candidate will have a job, and it will depend on the number of publications,” says Gonzalez. The job prospects for life scientists in the private sector in Spain are not much better, in contrast to the United States and elsewhere in Europe, she says.

Homeward bound

Andrea Baccarelli, an Italian postdoc in the genetic epidemiology branch of the National Cancer Institute (NCI), feels good about his

chances of returning. “My main objective is to go back to Milan, where I was working before coming here,” he says.

Baccarelli worked in Italy as a physician for five years in endocrinology before enrolling in a PhD program in environmental and occupational medicine at the University of Milan. After completing his PhD, Baccarelli expects to work in epidemiology, as he is following a cohort of people who were exposed to dioxin after an industrial accident at Seveso, Italy in 1976. He is one year into his two-year NIH contract. “I could extend it, but I also need to go back to finish my PhD program in Italy,” he says. “I feel that I’m creating my own expertise being here and gaining a deeper knowledge of genetics, toxicology, and epidemiology. This expertise, I think, will be needed in my department in Italy, and I’m pretty confident that I’ll be able to run my own research there.”

Biotech, but where?

Many of the same reasons that attract other European postdocs to the US—well-equipped labs and a mentor with complementary interests—also appealed to Detlef Vullhorst, a German postdoc at the National Institute of Child Health and Human Development. But different career goals might lead him to stay.

He is not pursuing an academic position back home, at least partly because even though the German *Habilitation* system—which requires a post-PhD thesis—is being phased out, its replacement may be just as cumbersome (see *Nature* 415, 257–258, 2002). If he does go back, he suspects it will be in biotechnology.

But Vullhorst, who has been at the NIH for just over two years, feels that the biotech climate is more favorable in the US than it is in Germany, although it is improving there. “Germany is now at least next to Great Britain in terms of being the most active in biotechnology in Western Europe,” he says.

For now, Vullhorst, like postdocs from anywhere, is mainly concerned with the task at hand. “I have not really educated myself and updated my knowledge about jobs in Europe as much as I should have,” he says. “Right now I have to get to my papers.” And, in doing so, hope that the future works itself out.

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