

COLUMN

Mobility rethought

Lars H. Breimer, Michael E. Breimer and Douwe D. Breimer say doing a postdoc abroad is unnecessary.

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It used to be almost an act of faith that a researcher should undertake a postdoctoral position abroad. In the days before cheap air travel and the Internet, this was the only way to gain international experience and exchange ideas with researchers in other countries on a daily basis. It was a once-in-a-lifetime experience. Now, it has become commonplace — and this is not necessarily a change for the better.

We propose that mobility should no longer be about postdocs spending one to three years abroad, but rather about institutions becoming more international by recruiting undergraduates from abroad, facilitating the movement of master's and PhD students from one institution to another and recruiting early-career professors for teaching and research positions.

This is happening in Europe, where universities have made an effort to become more cosmopolitan. Nations are harmonizing programmes to ease movement — for example, by letting students with bachelor's degrees from one country do a master's in another.

PhD positions are increasingly filled by international students. In the sciences, foreign citizens received 46% of the PhDs awarded in the United States in 2007–08, and 40% in the United Kingdom and Switzerland. In Sweden, 33% of those starting a PhD in the same time period were from elsewhere. Universities are also making their undergraduate programmes more international, by setting up foreign campuses and recruiting foreign students to the home campus. Some people take a year off after high school to travel, work or study abroad.

Thus, many researchers have had exposure to foreign countries before reaching the postdoc level. There is no longer the need for international experience during the postdoc that there may once have been. Perhaps the requirement is a myth, kept alive because grant and appointment committee members travelled themselves. Young scientists thinking of going abroad must make sure that any move is in the interests not only of enriching their lives, but also, more importantly, of expanding their CVs.

The postdoc is a key period in the development of a research career. The environment must allow mutual development, so that the visitor does not simply provide technical expertise to the host lab. Postdocs must ensure that their time abroad is worth more than time spent



at home. Ideally, a postdoc is done at an institution with a good reputation in the field, but this need not be in a foreign country. The urge to see the world can be satisfied in other ways.

Most would contend that those who move about in academia fare better than those who do not, but our experiences suggest otherwise. One of us (MEB) had a PhD supervisor who only ever worked at one university. His career did not suffer — he flourished, and all of his PhD students became professors. Most of them did postdocs abroad; but the one who was most successful (not MEB) never left the town, yet rose to be rector of his alma mater. Another of us (DDB) moved only 200 kilometres within the Netherlands: from Groningen to Nijmegen and finally to Leiden, where he supervised 50 PhD students and became rector of the university. The third (LHB) spent 26 years in England and the United States as a lecturer in molecular biology and epidemiology, and in drug development in the pharmaceutical industry, before returning home to work at a teaching hospital.

Once a connection has been made, worldwide collaboration can be fostered in many ways. Before crossing borders, postdocs should consider the career implications, good and bad. ■

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BIOTECHNOLOGY

Tax credits help firms

A federal funding scheme helped small US biotechnology companies to create and keep jobs in 2010, says a survey. Congress gave US\$1 billion to the Qualifying Therapeutic Discovery Project awards in 2009; eligible firms got up to \$5 million in tax credits and grants. A poll run by Penn Schoen Berland, a market-research firm based in New York, and sponsored by the Biotechnology Industry Organization (BIO) in Washington DC, found that the funding helped 226 companies to create about 6 jobs each, and save 7. The awards helped 80% of respondents to survive the economic downturn. Some 29% had been asked to move abroad, but 59% of those said the awards would keep them at home. James Greenwood, head of BIO, says these data will help efforts to extend the scheme.

POSTDOCS

Stipend raise proposed

In his 2012 budget, US President Barack Obama called for a 4% increase in the National Research Service Award (NRSA) postdoc stipends granted by the Bethesda, Maryland-based National Institutes of Health. The request is just the start of debate with Congress, so the gain isn't assured. In 2010, after two years without change, stipends were raised by 1% to US\$37,740 for first-year postdocs — but the National Postdoctoral Association (NPA) has called for more. A National Academy of Sciences report in 2000 recommended that first-years earn \$45,000. In a letter to Obama on 25 January, the NPA called stipends “unacceptably low”, noting that many US institutions use the NRSA stipend scale.

BIOMEDICINE

Stem-cell opportunities

A stem-cell research centre at the University of California, San Francisco (UCSF), will hire up to 18 biologists, neurologists, immunologists and researchers, and 12 postdocs skilled in human cell culture. The Ray and Dagmar Dolby Regeneration Medicine Building, opened on 9 February, houses 25 labs and will spearhead UCSF stem-cell research. Recruitment will focus on blood-forming systems, transdifferentiation, pulmonary systems and skin, says Arnold Kriegstein, head of the UCSF stem-cell programme. The centre is one of 12 funded in part by the California Institute for Regenerative Medicine, a US\$3-billion state initiative approved by voters in 2004.