Brain drain or brain gain?

By Chris Tachibana

Bringing Europe's top researchers back home

Daumantas Matulis had a job he loved with Johnson and Johnson in Philadelphia, one of the largest and most established pharmaceutical companies in the world, in one of the most vibrant cities in America. But he gave it all up to move home to Lithuania. Matulis could be a case study for Scandinavia and the European Union, which are working hard to bring top life science workers back to their home countries after they have trained abroad. Matulis left Vilnius to get his education in the U.S., just after Lithuania declared independence from the former Soviet Union in 1990.

Marie Curie brings scientists to the E.U.

After earning a Ph.D in Biochemistry, Molecular Biology and Physics from the University of Minnesota, Daumantas Matulis worked at Johnson and Johnson, developing methods for biochemical evaluation of compounds.
- I spent 10 yrs in the U.S., and starting thinking about moving back, to establish something, to be an example, to help the country. It was some patriotic feelings, and family, and the thought of being of use in Lithuania, he says.

Another draw was the possibility to be "a big fish in a small pond". In the U.S., Matulis says, he'd never be able to run large lab, as he does in Vilnius, because the competition for funding is so intense. Lithuania is small, but he networks extensively to establish contacts and connections, and he and his group were awarded a 2009 ScanBalt Bridge award for successful cross-border collaborations. In practical terms, what brought Matulis back was opportunity and money.
- I got a Marie Curie integration grant, which was 80,000 euro at the time, although now they are reduced. The Curie grant enabled me to come back and show the institute where I now work that I had funding. They had a laboratory in Biothermodynamics and Drug Design that needed a head, so they gave me additional funds for personnel, I reorganized the lab, and now it is up to about 15, plus 15 students, says Matulis.

Encouraging brain circulation

The Marie Curie actions are a collection of grants and programs designed to encourage researcher development and mobility, funded by the E.U. Seventh Framework Programme for research and technological development. The reintegration grants help ex-patriots come back to their home countries and establish themselves after at least three years outside of the E.U. or associated countries.
- We live in an interconnected, globalized world, and mobility is an asset. We can't retain people by force, but we can increase the attractiveness of the E.U. in general, says Catherine Ray, spokesperson for the E.U. Commission on Research.
The Commission believes researchers have to have mobility to go work elsewhere, and that this “brain circulation” will, at the end of the day, benefit the E.U. in general. So we don’t talk about “brain drain”, but “brain circulation”.

The Marie Curie grants are one of the concrete tools to promote researcher mobility. According to Ray, the Commission is working to create a “single market for knowledge and research” that is similar to the single market for goods by removing legislative, regulatory and cultural obstacles to researcher exchanges.

Catherine Ray says that the situation in Nordic countries is especially good. Several of the Nordic countries have met the E.U. objective of investing 3% of gross domestic product in research and development, putting them at the forefront of the E.U. and making them very competitive in the research world. She suggests the Euraxess Researchers in Motion website for information on jobs, funding sources and tools for researchers moving from one country to another.

The reality of coming home
Researchers returning to their home countries shouldn’t expect completely smooth sailing, however. Daumantas Matulis has gone through some difficult adjustments.

- The main problem is cost and bureaucracy, which are significantly greater in Europe. The cost, availability, speed of delivery of reagents, and services are all better in the U.S. pharmaceutical industry. There are more services and choices and it’s faster. In Lithuania, because of additional links in the chain of suppliers, more middlemen, and more value-added tax, we pay on average 30-100% more than in North America for every reagent, which quickly uses up grant funds, and we see up to a three-fold increase in delays.

Even the smallest purchases require written justification, and because payments are slowed down by paperwork, Matulis often has to pay late payment fees. Some of his employees spend most of their time writing purchase justifications instead of doing science. Although he knows the rules are to discourage corruption, he feels the paperwork just creates obstacles for the majority of honest researchers, and that the E.U. will have to face issues of excessive bureaucracy in the future.

Effective research in a small country
In spite of the challenges, Daumantas Matulis says coming home was the right decision. He praises his personnel, saying he feels that he can do effective research in his home country because the people are so good. He’s also played his cards right. He knows he’s too small to compete with Johnson and Johnson, so he has maintained collaborations with them instead. He says working in a small country is an advantage, because of the level of support and the networking possibilities.

- Because the economic situation in Scandinavia and the U.S. is about the same, there may be less of a feeling that upon return, an ex-pat can make an impact, says Matulis.

- Still, the ex-pat should think of what they could contribute and the opportunities that are missed by staying abroad. Home countries need the knowledge a returning ex-pat can have, and the teaching contribution they can make. Think of it as going against the stream. One to ten percent of all people go against the trends, he concludes.

So a returning ex-patriot can be one of the trailblazers.

Resource websites
Euraxess: www.ec.europa.eu/euraxess/index_en.cfm?l=1=0812=0813=0
Marie Curie Actions: www.ec.europa.eu/research/mariecurie-actions/
Scanbalt: www.scanbalt.org