

BRICKS & MORTAR

GRADUATE JOURNAL

A rewarding journey

Accepting a studentship at the International Institute of Molecular and Cell Biology in Warsaw, Poland, was a crucial step for my training. But in order to take advantage of it, I've entered what I call my 'commuting matrix'. As a student without any real income, I can't afford to rent a flat in the capital, so I have chosen to live in my home town of Lodz and travel to and from Warsaw every weekday to save money.

The 120-km train trip takes two hours each way. To make the most of this time, I read scientific articles on the train. And even though I work in the high-tech field of bioinformatics, I use low-tech pen and paper to scribble down scientific problems, and to plan my day and work out longer-term goals.

When I get to Warsaw, it all seems worthwhile. Working with a leading team of researchers is not only a test but also great fun. There is a friendly atmosphere and I am surrounded by helpful people and have a boss who believes in giving young scientists a chance.

I wish that more students could work with such helpful teams and supervisors, who see that the future lies in the hands of young people like me — and who are prepared to make an effort to break down the barriers that stand in our way. ■

Karolina Tkaczuk is a graduate student at the Technical University of Lodz, Poland.

Scottish Structural Proteomics Facility, University of St Andrews, UK

A £6-million (US\$11-million) lab dedicated to finding treatments for 'superbug' infections — those resistant to conventional antibiotics — opened at the University of St Andrews in Scotland in December.

The Scottish Structural Proteomics Facility (SSPF) is a collaboration between the universities of Dundee and St Andrews. It is designed to streamline the process of drug design, from the identification of novel therapeutic targets for drug-resistant bacteria to producing candidate drug leads.

The centre emerged from the realization that Britain had fallen behind Japan and the United States in this research field, says its co-director James Naismith, professor of chemical biology at the



University of St Andrews. It is intended to close a gap in both skills and technology.

Essentially a structural-proteomics facility dedicated to drug discovery, the SSPF will house industrial-scale equipment for crystallography and nuclear magnetic resonance spectroscopy, with an emphasis on expressing difficult-to-produce membrane proteins. It will also have large-scale robotic equipment with cloning and expression technology.

Naismith says that this technology will make it easier for him to recruit international talent. Already there are signs that the SSPF is helping to close the skills gap, as it has attracted scientists from Japan and the United States. "We are now recruiting for other principal investigators,"

Naismith says.

Researchers will collect the findings on a database of enzymes to share with colleagues around Britain. They are especially interested in viral entry to cells and replication.

The centre was initiated with a development grant from the Scottish Higher Education Funding Council, and established with £600,000 from the two universities and £4.2 million from the Biotechnology and Biological Sciences Research Council. ■

Paul Smaglik is editor of Naturejobs.

MOVERS

Peter Calow, director, Environmental Assessment Institute, Copenhagen, Denmark



The career of Peter Calow has undergone two large changes of direction. In 1984 the British zoologist left basic research — his PhD from the University of Leeds was on the population ecology of aquatic snails — to work on applied ecotoxicology and environmental risk management.

Twenty years on, Calow has made another big move, this time to environmental policy assessment. In November, the 57-year-old professor at the University of Sheffield was appointed the new director of the Danish

Environmental Assessment Institute (EAI) in Copenhagen. For the next five years, he will be responsible for socioeconomic and cost-benefit analyses of a wide range of environmental policy options.

"My career has been a natural progression from experimental science to the policy arena," he says. "I think that this is now the most exciting job I have ever had."

The EAI was set up by the Danish government just two years ago, as an independent environmental think-tank. Thanks to its prominent founding director, Bjørn Lomborg, the small institute has quickly received attention from far beyond Denmark.

Calow appreciates the contribution of his predecessor. Lomborg, he says, asked important new questions — a practice that Calow wants to continue. He knows all about the controversy associated with using economic approaches to environmental problems.

But thorough cost-benefit analysis is crucial to finding the best policy solutions to many environmental issues, from chemical legislation to climate change, he says.

As a PhD student, Calow was greatly influenced by the work of Nobel laureate Peter Medawar, particularly his book *The Art of the Soluble*. "Medawar taught me a lot about how to ask the right questions and design experimental approaches to answer them." No wonder, then, that Calow has always advised his students to read the book.

Defining the right problems and questions will keep Calow busy for a while, as he and his staff develop a strategic plan for the EAI. Although priorities may shift, the institute's core activities will remain, he says. "We want to influence policy-makers and the public, and give inspiration to the academic community in Denmark, Europe and the whole world." ■

CV

1989–2004: Professor of zoology, University of Sheffield, UK.

1996–2003: Director, Environmental Businesses Network, Sheffield, UK.

1991–95: Director of the Institute of Environmental Sciences and Technology, Sheffield, UK.

1984–1989: Head of the zoology department, University of Sheffield, UK.