MOVERS

Bertil Andersson, Provost, Nanyang Technological University, Singapore



2004-07: Chief executive, European Science Foundation, Strasbourg, France 1999-2003: President, Linköping University, Linköping, Sweden 1996-99: Dean, chemicalsciences department and pro-dean of the science faculty, Stockholm University, Sweden

Nothing appeals to Bertil Andersson like speed. As an undergraduate, he was captivated by the fast biochemical reactions taking place in nerves. But his supervisor directed him towards reactions in photosynthesis — a field of growing interest in the mid-1970s.

Andersson pursued a graduate degree in biochemistry at the then newly established Umeå University in northern Sweden, which had a pioneer spirit — perfect to encourage his interest in the burgeoning field of plant molecular biology. As a postdoc at Australia's Commonwealth Scientific and Industrial Research Organisation, he helped decipher the now textbook descriptions of chlorophyllprotein complexes and their role in energy conversion.

He returned to Sweden as an associate professor in biochemistry at Lund University, and quickly became chair of Stockholm University's biochemistry department at 37 — a pivotal moment in his career. He discovered a talent for administration and was soon promoted to dean, which led to committee chair positions on the Swedish Biochemical Society and the Nobel Committee for Chemistry. "I made the decision to manage well and sleep less," he says.

But juggling research and administrative duties eventually became frustrating. Andersson accepted the post of chief executive at the European Science Foundation, to focus on creating a research arena that could better compete with the United States, Japan and rapidly advancing countries such as China. He's most proud of a grant programme that champions Europe's finest earlycareer scientists. He also designed a common procedure for the peer review of grant applications, which had been plagued by fragmented, nation-specific approaches.

Now he has been lured to a part of the world famous for its rapid innovation. In April, Andersson will become the first provost of Nanyang Technological University (NTU), a major university in Singapore boasting 25,000 students.

"We rightly believed that strong scientists, such as Andersson, would be attracted to a system that has ready funding and few boundaries to create research programmes," says Haresh Shah, Stanford University professor emeritus in engineering and member of the NTU's board of trustees.

Andersson says he wants to take advantage of how quickly the Singaporean government moves from idea to implementation — and he's excited about connecting his European and US colleagues with Singapore's opportunities and abundant science resources.

NETWORKS & SUPPORT Goodbye Poland, again

In 1999, I left my home country of Poland, where I had earned an MD and a PhD in neuroscience, to pursue postdoctoral training in the United States. After five years I returned to my homeland, hoping to set up my own lab there. It wasn't to be.

I was lucky enough to obtain a short-term contract, courtesy of my PhD supervisor. But I was on a long waiting list, with little chance of gaining research independence. After a year, I returned to the United States, where I took a junior faculty position at Johns Hopkins University.

Poland loses biomedical talent because its academia has difficulty accommodating new independent laboratories. A few institutions use outside recruits to replace retired scientists. Most, though, engage in 'inbreeding', which contributes to an inert and defective system. Internal recruitment also puts candidates who spend years abroad at a disadvantage. Young researchers determined to stay in their homeland often take dead-end technical positions or wait years for a chance to set up a lab.

The West offers financial support in the form of programmes to help Polish scientists return, such as the international researcher programmes at the Howard Hughes Medical Institute or the Wellcome Trust. But these are more likely to help local scientists who have already been accepted by home institutions and supported by local foundations. They do little for 'excess' scientists because they don't create new laboratory space.

In a European country with a long communist history, only government can help academia. But biomedical research and development issues are not on any political party's agenda. The ruling parties, obsessed with historic and nationalistic issues, have little interest in innovation. Politicians do not see R&D as a good investment that facilitates development.

The European Union and philanthropists may help more by not pouring resources into academia but helping to develop the commercial side of science. This could be achieved, for example, by creating more technology-transfer offices at major universities and training Polish scientists in the West to work in them. With luck, this would help create the right climate for private investors, without whom the sustainability of the industry is hard to imagine.

Despite the unfriendly climate, a handful of medical biotech start-ups has appeared in recent years. A spirit of entrepreneurship has somehow survived. I hope it will be nurtured. Arkadiusz Szklarczyk is a research associate at the Department of Neurology, Johns Hopkins University Medical School in Baltimore, Maryland, USA.

Taking a gamble

I'm an ex-PhD student. It's been 15 months since I submitted my thesis, on the tectonics of New Zealand, and 10 months since I successfully defended it.

Where to go after your PhD? If you've got through without every spark of interest being crushed out of you (I did), and you still feel masochistic enough to brave further exposure to the academic world (I'm a glutton for punishment), a postdoc is the usual next step. But my step was sideways, into a rather split-personality technician/teaching post in my old lab at the University of Southampton, UK. Despite a secure job, and valuable teaching experience, the lack of opportunities for new research made me worry for the future of my CV.

So I find myself taking a bit of a gamble. This month I'm leaving England to take up a postdoc position in Johannesburg. I'll not only be living and working in a country I've never visited before, but I'll also be trying to work out the tectonic history of rocks almost two billion years older than any I've studied before. If that's not enough, I also need to determine whether I can turn some half-formed scientific ideas and interests into a coherent research programme. Do I have what it takes to stay in the game long term? Is that what I want? Chris Rowan is about to become a postdoctoral fellow in the geology department at the University of Johannesburg, South Africa.