MOVERS

Dave Tapolczay, chief executive, MRC Technology, London



2007-08 Chief scientific officer, SAFC Pharma, Cambridge, UK 2003-07 Vice-president, GlaxoSmithKline Pharmaceuticals, Harlow, UK 2000-03 Vice-president, Millennium Pharmaceuticals, Boston, Massachusetts

Dave Tapolczay knows a thing or two about new technologies. Early in his career, he developed chemical compounds for use in insecticides and, later, for pharmaceutical targets. More recently, he's helped to commercialize technologies that automate chemical processes. He has launched three biotechnology companies, a consulting firm and an investment company. And now he is taking his skill at spotting promising technology to the UK government sector as the new chief executive officer of MRC Technology (MRCT), where he'll take charge of technology transfer.

In 1997, Allan Marchington, a venture capitalist with Apposite Capital in London, discussed a start-up venture with Tapolczay. Marchington says that within two minutes he knew he'd found the right person. Tapolczay had an imaginative approach to the nascent company's portfolio. "He could see the best opportunity to make commercial sense from the science," said Marchington. In 2000, they sold the company to Millennium Pharmaceuticals, and Tapolczay moved to Boston, Massachusetts, to take responsibility for the development of the entire Millennium pipeline. During his tenure, Millennium introduced Velcade, the first proteasome inhibitor marketed, and a second- or third-line treatment for multiple myeloma.

"I've had a quite varied career," says Tapolczay, noting that each sector has its appeal. In large corporations, it is the opportunity to work on cutting-edge, innovative science. For biotechnology start-ups, it is the "adrenaline of trying to keep the company alive and make it a success". Tapolczay earned a BSc and a PhD in chemistry from the University of Southampton, UK. After a postdoctoral fellowship at the University of Oxford, he got his start in industry at G. D. Searle Pharmaceuticals, and then moved to ICI.

Tapolczay has several goals in his new post: raising royalty revenue (MRCT had income of £46 million (US\$92 million) in fiscal year 2006-07, all of which goes back into MRC research); spinning off companies from the MRC (there have been 17 in the past 20 years); licensing products to existing companies; and using new disease biomarkers, diagnostics and therapies to improve health.

Tapolczay is also keen to explore new licensing opportunities with US and Japanese companies. Still, he says the majority of his effort will be dedicated to working directly with MRC-funded institutions. "One thing I'll do is undertake an audit," says Tapolczay. He envisages rating performance on a scale of 1 to 10. "If it's a 5," he says, "I want to know how we can do better." Jill U. Adams

NETWORKS & SUPPORT Göttingen bridges the gap

A new doctoral training programme will tackle seriously complex problems. Called the 'Physics of biological and complex systems', the programme is part of the International Max Planck Research Schools (IMPRS), a group of interdisciplinary centres of excellence run by the Max Planck Institutes in conjunction with German universities.

The new programme will build on the University of Göttingen's expertise in physics and will focus on, for example, the timing of neural networks and the physics of cardiac dynamics. It is a joint venture between two Göttingenbased Max Planck Institutes and the university. The Max Planck Society is devoting approximately €4 million (US\$6.2 million) to the programme over the next 6 years.

Helmut Grubmüller, a director at the Max Planck Institute for Biophysical Chemistry, oversees the programme and extols its breadth and structure. It will focus both on using basic physics to solve existing biological problems and researching the unique physics of biological systems. Other programmes tend to keep the topics separate. This structured, fast-track PhD programme will involve special courses, lab rotations and methods tutorials to help students earn their PhDs within 3.5 years compared to 4 or more. Recent recruitments, including Grubmüller and Eberhard Bodenschatz, a director at the Max Planck Institute for Dynamics and Self-Organization, have strengthened the technical expertise in superresolution optical microscopy. For example, students will learn to image intracellular structures to a resolution of 15 nanometres and perform singlemolecule spectroscopy.

Such expertise will help the new programme address the growing interest in nanometre-scale biological techniques. Bodenschatz believes this innovative training will form a bridge between Göttingen's strong physics and biosciences communities. Although the official start date for recruiting students to the IMPRS is 1 May, five of the 30 slots are already filled.

The IMPRS programmes are part of Germany's ongoing efforts to strengthen graduate training. Of the 49 existing schemes, two — the IMPRS for molecular biology and for neurosciences — have already proved successful at Göttingen. The molecular biology programme was recognized in 2006 as one of the top 10 international master's courses in Germany by the German Academic Exchange Service.

Virginia Gewin

Getting that lucky break

"If you can't get a project to work," a fellow postdoc stated, "you're no good." Her comment, expressed during an informal discussion with senior management, was undisputed. I pondered how many failed projects are permitted before a budding scientist is dismissed as "no good".

During the past two years, three of my projects have ended prematurely thanks to negative results and reagent problems. My objective now is to discover the role of a new protein. But more than a year later, it seems that my original hypothesis is wrong, and I am left questioning my choice of projects.

On Singapore's Biopolis campus where I work, fields with great potential for therapy and profit are strongly encouraged. A senior scientist's sole question about my work underscored this emphasis: "Is it big?" he asked, alluding to its chances of being published in a high-impact-factor journal. Considering that the direction of my project remains unclear, let alone its long-term prospects, well-meaning investigators have questioned whether I should stick with it. Indeed, how do I know when to cut my losses?

One senior scientist told me that a successful project comes from "sheer luck". I'm not usually superstitious, but I welcomed this Chinese New Year by switching on all the lights in my apartment to summon the God of Fortune. Amanda Goh is a postdoctoral fellow in cell biology under the Agency of Science, Technology and Research in Singapore.