

University challenge

Cambridge is revamping its approach to technology transfer — but will it work? Colin Macilwain reports.

The University of Cambridge is surrounded by a high-technology boom. The area is one of the fastest-growing and wealthiest in Europe, with an estimated 1,500 high-tech companies employing some 45,000 people. And in the popular imagination, this success is widely attributed to the transfer of ideas from the university into businesses.

But until recently, the university took a surprisingly relaxed approach to technology transfer. Academics were allowed to develop their own patents pretty much as they saw fit, and the university's income from royalties was fairly low by international standards: some £2.7 million (US\$4.7 million) last year. The region's high-tech success actually came about without any real concerted effort by the university itself.

That is about to change. Last December, the university revised its rules to give it first option on the patent rights for any discovery made in its labs. And Cambridge Enterprise, the unit established to run technology transfer and help young firms at the university, will be spun off later this year as a free-standing company. It will be run by Teri Willey, a US technology-transfer specialist with a strong track record in leading research universities in the US midwest. Her brief is to boost royalty income while providing a level of service for academics that will match the best in the world.

For Cambridge academics, the changes have come not a moment too soon. "The university has been pretty poor" at supporting technology transfer, says one academic with extensive industrial interests, who declined to be identified. "There's been too little support, and it's been poorly focused."

Originally, the technology-transfer office was part of the university's research-services division. But a review in 2004 led to Cambridge Enterprise being split off from the division, and the unit is now set to gain much more autonomy.

Fully owned by the university, the new company will negotiate licensing agreements for patents held by the university — although academics will be allowed to go elsewhere with any patents that it doesn't license out. It will also advise academics on setting up their own companies, provide some



Cambridge is seeking to foster innovation beyond the ancient university's walls.

of them with seed capital, and help them source larger amounts of venture capital.

The company's mission is to serve the academics, stresses Ian Leslie, pro-vice-chancellor for research. "It is not a vehicle to make vast amounts of money for the university," he says. Nonetheless, he says that top US schools aim to generate 4–6% of their research income from licensing fees on their patents. "At Cambridge, we're running at 1 or 2%," he says. "I think over ten years we can catch up."

The grand design for Cambridge Enterprise nevertheless got off to a slow start. After it split from the research-services division, the unit struggled to secure a permanent director — largely, according to university officials, because neither the reform of intellectual-property rules nor plans for the new company were complete.

Willey will arrive in August to take the helm, and she is enthusiastic about the unit's prospects. "There's a very solid foundation for doing this kind of work," she says. She describes the climate for licensing and venture capital

in Cambridge as slightly tougher than the hotspots on the US coasts. "But it's actually very similar to the areas where I've worked," she says. "There are a few big venture-capital funds and lots of developing ones." Nevertheless, Willey notes that there is a gap between what hap-

pens in Britain and at the top US environments in Boston and northern California.

In 2004, the Cambridge cluster attracted about 8% of all European venture-capital investments. "It's definitely one of the best clusters in Europe," says David Gill, director of Cambridge-based ET Capital. "But the downside is that it is actually quite small, especially compared with Silicon Valley." Some £500 million in fresh capital has been committed to Cambridge companies in the past decade, Gill says — considerably less than the amount raised last year alone in the area around Stanford University in California.

Economists say that the university's technology-transfer office is only one small component in the network of relationships that help high-tech businesses get off the ground. And some academics remain sceptical about its role. "I don't actually believe that the technology-transfer efforts have that much impact on how these things happen," says Henning Siringhaus, a Cambridge physicist and co-founder of electronics firm Plastic Logic. Siringhaus and others argue that entrepreneurial expertise inside academic departments counts for more.

Leslie nonetheless sees Cambridge Enterprise as a vital cog in the larger, university-industrial complex. "The University of Cambridge is now part of an innovative cluster that relies on an entrepreneurial culture," he says. "Cambridge Enterprise is a part of that, and it's a part that we'd like to see work very well." ■



Teri Willey: a strong track record in the US midwest.

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