

IP/Technology Transfer

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▼ European universities weigh spin-offs versus licensing patents

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With commercialization of academic research slowly rising, debate is brewing over whether spinning off young companies can become too much of a good thing.

With regional development and high-tech employment near the top of the agenda in many countries of the EU, a flurry of conferences will be discussing the best way to put the fruits of academic research, including biotechnology, to economical use. Lessons learned in the UK, one of the European countries most advanced in exploiting its homegrown knowledge, could prevent other countries from making the same mistakes when developing their biotech sector. In particular, the high number of companies spun out of UK universities is spurring debate over whether the country should start shifting priorities from creating spin-offs to licensing inventions to outside companies.

At conferences such as "Technological innovation and regional cohesion in a wider Europe," April 20–22 in Krakow, Poland, and organized by the EU-funded European Regions Knowledge-Based Innovation Network, issues like benchmarking and best practices in transferring innovation to regional economies will be hotly debated. It is only one of many conferences and networking programs the EU has been keen to promote.

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Ederyn Williams

European countries developing their own policies to support innovation in the field of biotechnology often look towards the UK, which has been on the forefront of university-business cooperation since its government started funding technology transfer about a decade ago. But by being one of the forerunners, the UK has opened the door to experimenting and learning from its own mistakes.

A survey by the Higher Education Funding Council for England (HEFCE)—covering nearly all 164 universities in the UK and published in January—showed British universities continuing to ferociously spin off startup companies. For every billion dollars spent on university research in the 2002/2003 academic year, the HEFCE numbers demonstrate, British universities spun off more than 38 new companies—more than three times the rate of universities in the US, according to surveys by the North American Association of University Technology Managers. A great many of those startups were in the biotech sector.

The picture is reversed, however, where patent licensing income is concerned. Whereas in the US royalties from licensed inventions pay more than 3% of universities' research bill, in the UK it is only 1%, prompting some to say that Britain has its priorities wrong.

“Most European countries and universities however have yet to start incorporating the commercialization of research into their policies, says , technology transfer consultant, University of Twente”



Alen MacWeeney/CORBIS

UK universities are producing a bevy of biotechnology spin-offs, but the carping about biomedical license revenues is growing.

Peter van der Sijde

But according to Ederyn Williams, director of Warwick Ventures, the technology transfer office of the University of Warwick, to differ from the US doesn't necessarily mean the UK is doing it wrong. Many of Britain's spin-offs are doing well, he says, so it's good policy to continue to create them. The difference in licensing income, Williams says, can be fully explained by US universities' head start. In the UK, universities created technology transfer offices a decade ago, whereas US institutions like the Massachusetts Institute of Technology in Cambridge, Massachusetts started licensing out patents in the 1940s. Criticizing the British for not licensing out enough is "as meaningless as criticizing 7-year-old children for not running as fast as 15-year olds," Williams adds.

The UK debate will be closely followed in the rest of Europe, where good figures are hard to come by but experts agree most countries trail the UK both in patent licensing and creating spin-offs. Germany, however, is picking up steam, they note. In 2002 the country belatedly handed universities the option of claiming and exploiting their employees' inventions, but last January it opened up its generous EXIST-SEED program nationwide, offering young academic entrepreneurs tens of thousands of euros to help their spin-offs survive the first year.

Most European countries and universities, however, have yet to start incorporating the commercialization of research into their policies, says Peter van der Sijde, a technology transfer consultant at the University of Twente (Netherlands) and coordinator of GlobalStart, a spin-off stimulation program supported by the European Commission. "Many programs depend on the enthusiasm of one individual at the university's top," Van der Sijde says. "It will take a long time to change," he adds.

Williams is optimistic that, with the right policies, attitudes can change fast. In the UK, he says, central funding of technology transfer at universities started only a decade ago. "Look what has happened since then," Williams says. "Other countries can draw the lessons."

Web links

Websites referenced:

- [Higher Education Funding Council for England](#)
- [Association of University Technology Managers](#)
- [The Technology Transfer Office of the University of Warwick](#)
- [University of Twente GlobalStart](#)

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