## BUSINESS

## **Innovation endgame**

The commercial practices of some universities are quietly being transformed by an international chess grandmaster, as Jim Giles reports.

avid Norwood, a former captain of the English chess team, has a strong pedigree in technology transfer. Brokers recall Norwood's name from 2000, at the height of the last stock-market boom, when he sold off a technology consultancy firm for a reported £34 million (US\$60 million) — just seven months after he had founded it.

Now Norwood is focusing on the academic world. His company IP2IPO has struck deals with British universities that want help in getting their spinoff companies up and running.

In the United States, some

academics meet venture capitalists every other day. That's not the case in Britain, however, and university technology-transfer offices face a hard slog in trying to raise funds to back new spin-off companies. IP2IPO offers to shortcircuit the process by signing broad, long-term agreements with universities which allow it to take the lead in exploiting their research.

## **Right chemistry**

Norwood's largest and best-known deal was struck five years ago with the University of Oxford, which had then managed to raise only two-thirds of the £60 million needed to build a new chemistry building. The newly founded IP2IPO offered it the missing £20 million in return for half of the university's stake in all chemistry spin-offs until 2015.

Some financial observers were sceptical particularly a short time afterwards, when the dot-com bubble burst — about the potential of the deal to unearth discoveries worth investing in. And some Oxford chemists feared that they would be pressured to move into more applied work.

Norwood did not respond to enquiries from *Nature* about how well the agreement has worked. Although analysts, and some researchers, remain cautious, the signs are that both sides have done well so far. "There were concerns when the deal was finalized, but those fears were not realized," says Colin Bain, a surface chemist who left the University of Oxford



Winning move: a company founded by David Norwood (right) is bolstering technology transfer at British universities.

last month for the University of Durham. "There was no pressure from IP2IPO to change the direction of research." And the investment company has already helped Oxford academics to launch eight new companies, including the drug-discovery outfit VASTox, which raised £15 million when it floated last October.

VASTox specializes in screening large numbers of different molecules against zebrafish and fruitfly embryos. Since many genetic sequences are conserved across species, pharmaceutical firms can use the information to guide drugdevelopment work. But IP2IPO's portfolio is not restricted to the life sciences: last year, for example, it bought one-third of Perpetuum, a University of Southampton spin-off. Perpetuum develops devices that generate electricity from vibrations, and these can be used in sensors to monitor machinery.

The deal with the University of Oxford got IP2IPO a lot of attention, and other agreements with King's College London, and the universities of Southampton and York soon followed. In these cases, however, the company has agreed to create a fund that will invest in future spin-offs, rather than giving cash upfront to the university. IP2IPO also bought Techtran, a company set up to operate in association with the University of Leeds. Techtran provides technology-transfer services to academics at the university in exchange for a stake in companies that they create.

The universities that have teamed up with

IP2IPO think it brings them a useful package: valuable seed-funding as well as business advice that should help the companies they set up prepare to go public.

But some of the larger UK universities are taking a different path. Imperial College London has created a company of its own, Imperial College (IC) Innovations, to do roughly what IP2IPO does. This April, the university raised £20 million by selling a 29% stake in IC Innovations to outside investors. Susan Searle, its chief executive, says that her firm provides an integrated service to academics, from identifying market potential to securing venture capital. If all goes well, she aims to float IC Innovations within three years.

## Dare to dream

And the University of Cambridge — perhaps the most commercially successful research university in the United Kingdom — has no immediate plans to team up with IP2IPO. "At Cambridge it would be a non-starter," says Ian Leslie, the university's vice-chancellor for research. He thinks that researchers would be uncomfortable with deals that promised stakes to any single outside company.

Cambridge academics like to keep control over the commercialization of their work, he says: some prefer to put their intellectual property into the public domain. But Leslie acknowledges that raising seed-funding is a problem and adds that he might consider a deal like that reached between IP2IPO and the University of Southampton at some stage in the future.

Graham Richards, chair of IP2IPO and head of the University of Oxford's chemistry department, says his company is currently considering several such potential deals and should sign at least one before the end of the year. "We want to turn IP2IPO into a £1-billion company," he says. Interim results released last month show that it earned £3.5 million in the first six months of this year, and now has stakes in 33 university spin-offs. So far, says Richards, "it's been better than we dared dream".

With stakes in a healthy roster of companies, Norwood and Richard's hopes could yet be realized. But others who know the market sound a note of caution. One UK-based venture capitalist, who asked not to be named, claims that British universities are creating more companies because of government pressure to do so, not because there has been a boom in profitable ideas. He estimates that less than 5% of all university spin-offs make it to flotation, with many floundering before even attracting much venture capital. IP2IPO may have shaken up the UK technology-transfer scene, but it remains to be seen whether Britain's universities can create enough wealth to make a success of Norwood's game plan.