

## IP/Technology Transfer

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### ▼ 'Spinning in': a new concept for technology transfer?

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#### **In the first move of its kind, an academic institution has 'spun in' a biotechnology company, acquiring all of its assets.**

The University of Pittsburgh Medical Center (UPMC; PA, USA) announced on February 17 that it received the gene regulation firm RheoGene (Norristown, PA, USA) as a tax deductible gift of undisclosed value from RheoGene's parent company Rohm and Haas (Philadelphia, PA, USA). The donation, which includes intellectual property (IP), equipment, compounds, biological materials, research and commercial agreements and licenses, provides UPMC with key technology for its regenerative medicine research. Although UPMC would benefit from absorbing or 'spinning in' RheoGene for strategic reasons, most universities may not be attracted by such a model.

Spinning RheoGene into UPMC came about because of a prior collaboration between RheoGene and UPMC's McGowan Institute for Regenerative Medicine. RheoGene's system for managing gene expression "was a compelling technology for which there was no equivalent, both technically and from a business perspective," says McGowan Director Alan Russell, who made the suggestion to spin RheoGene in. "When we see an opportunity like a RheoGene that we think in the long run is going to be able to make us better at what we do, we take advantage of it," adds Talbot Heppenstall, treasurer of the UPMC board.

RheoGene's CEO Tom Tillett explains that the company had been struggling to raise capital via traditional means since December 2002, when Rohm and Haas, a \$6 billion specialty chemical company, made a strategic decision not to pursue biotechnology. Spinning into UPMC, says Tillett, "was a creative way of keeping the company going." For RheoGene, the deal means that the company can continue to operate as a for-profit organization, albeit one that is owned and funded by UPMC.

RheoGene's technology can be applied to several areas of biotechnology—transgenic animals, disease models, biotherapeutic protein production, in kits as a research tool, as well as in human therapeutics. The challenge, adds Tillett, was to avoid buyers that would value the technology for only one application. "There was not one logical buyer that would value it in all areas. And so we came up with what we felt was a novel idea and that would be to donate the entire company to a strategic investor who would be a nonprofit and who would be willing and able to take it forward."

UPMC fit the bill and several criteria contributed to the success of the deal (see [Box 1](#)). Indeed, UPMC already has interests in about a dozen biotech companies, according to Tillett. UPMC has accepted a donation of IP before and in 2003 UPMC led a group of investors that formed Regenecor Holdings, later renamed Revivacor (Blacksburg, VA, USA), to acquire the regenerative business of PPL Therapeutics. An earlier collaboration between the UPMC's Starzl Institute and PPL meant the investment was—again—important to a key institute at UPMC. "Though these deals were different, they established the concept of spinning in technology and a company," says Russell.

Academia in general, however, is not so entrepreneurial. Although the technology-transfer arms of many institutions are routinely involved in commercializing home-grown IP, not many have the capability to in-license on a large scale. Although they are open to the idea of spin-ins in theory,



The University of Pittsburgh Medical Center

The University of Pittsburgh Medical Center has spun in a biotechnology company whose intellectual property suits the needs of its McGowan Institute for Regenerative Medicine (featured above).

no one else has acquired an entire company. John Burt, head of the medical sciences team at Imperial Innovations, the technology transfer company of Imperial College (London), explains that most of their deals are based on out-licensing university technology. "We have more than we can really cope with in terms of innovation coming through. So actually acquiring new technology is not something we're generally looking to do," he says.

Burt notes, however, that many academic institutions recognize the gap between the basic research being done and the point when the pharma companies or the more established biotech companies are looking to in-license products. Thus they are looking at ways of increasing their discovery and translational research activities. "Building that capability can be done organically or using a spin-in model," he says.

So are we likely to see more of these types of spin-ins across the industry in the future? Steven Burrill, CEO of Burrill & Co. (San Francisco, CA, USA), says that this is unlikely to be an emerging trend. "I don't think we'll see much of spinning into universities—public or private—if any, unless there's a strange set of facts where there's really tricky IP issues and the only way to clean up the IP is to reacquire it," he says.

#### **Box 1: Four criteria that created spin-in success**

1. A strategic fit. UPMC already had an interest in the technology through the collaboration between RheoGene and the University's McGowan Institute.
2. UPMC had a vehicle to make investments in RheoGene to continue the operation.
3. UPMC had the enthusiasm and desire at senior levels to do the deal.
4. UPMC has expertise and experience in the governance of biotech companies.

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