

## Can Europe accelerate out of trouble?

Europe should seriously consider the 'accelerator' concept to foster the sustainability of its biotech companies.

Many of Europe's biotech firms appear permanently stuck in a state of arrested development. Indeed, compared with their counterparts over the ocean, European startup companies continue to find it hard to achieve the size and stature requisite for commercial success. A recent report reveals that compared with the United States, Europe has an awful lot of small companies that, on average, grow much slower than their US counterparts. But help may be at hand in the form of a new incubator concept pioneered on the West Coast of the United States.

According to the latest report from EuropaBio and consultants Critical I, *Biotech in Europe: 2006 Comparative Study*, two-thirds of European companies have under 20 employees, whereas two-thirds of US companies employ more than 20 people. One would expect that companies established for, say, 2 years or less would be small, and the report confirms this, both for Europe and for the United States. In the United States, however, the initial phase of company growth is rapid: by the time US companies are 5 years old, 75% of them have more than 20 employees; in Europe, by contrast, companies employing 'less than 20 employees' are the largest group, right up until the firms are beyond 15 years old.

One reason that US biotech fares better is that US entrepreneurs and investors continue to look for ways of growing companies more efficiently. One of the models that is growing in popularity is the accelerator.

Like incubators, accelerators provide customizable laboratory and business space for young companies. Unlike incubators, which bring small chunks of fluffy capital, cramped facilities and low-grade access to a centralized team of distracted and generically qualified management mentors, accelerators provide a combination of concentrated capital overlaid with specific and committed technical, clinical or market expertise. The availability of greater amounts of seed and startup cash (on the order of ~\$4 million per company) certainly reduces one of the major risks that young companies face, and by favoring companies that are past the point of discovery, accelerators certainly cut out a large chunk of technology risk. However, accelerators endeavor to take risk reduction even further.

Consider, for instance, the eponymous Seattle, Washington-based Accelerator, started in 2003. Leroy Hood of the Institute for Systems Biology is Accelerator's president (p. 1055), and Amgen's venture fund is a founding partner. That gives companies backed by Accelerator (five, so far) instant access to world-class understanding of technology and market issue. Through its founders and management, Accelerator has close ties to several of the Pacific Northwest's (and America's) leading venture capital firms, such as MPM, Versant and ARCH.

Although Accelerator backs companies addressing various slow steps in the healthcare product development process, other accelerators focus on particular areas of clinical practice. One of the most highly focused is the Hackensack, New Jersey, firm Advanced Technologies,

which has started or re-started six companies that are each developing medical devices for interventional cardiology products. The team running Advanced Technologies includes seasoned investors, cardiologists and clinicians, all of whom have clear roles to play in speeding up the development, clinical adoption and commercialization of cardiovascular devices and hence in providing expedited investment and business exits.

More accelerators are on the way. A consortium of large pharmaceutical firms is said to be considering creating one in the Cambridge, Massachusetts biotech cluster. And another may be built in the San Diego biotech cluster.

Oddly, just as accelerators are finding new ways to make the milieu for new US firms more encouraging and less risky, the opposite may be true in Europe. In the United States and the more advanced parts of Europe, the rate of formation of new companies has slowed in recent years. Consequently, a large proportion of the new European foundlings are arising in nations or regions that are themselves new to biotech. Often, there are precious few biotech-relevant resources in these locations, beyond a bit of seed money: there are no substantial finance streams, no management skills, no biotech-experienced support infrastructure of lawyers, accountants and consultants.

Such environments are precisely the opposite of accelerators, and are likely to have precisely the opposite effect. Global competition and technology supercession means that biotech firms need to have a 'Red Queen' mentality. But trying to 'run as fast as you can just to stay still' is difficult if you are wading through mud.

The lesson for companies in nations with new, fledgling biotech sectors is that they need to reach out beyond national borders to management and financiers in other, more established biotech clusters. It's important to work with these experienced executives and investors because they are familiar with the idiosyncrasies and protracted timelines of life science ventures and they have the requisite historical and international perspective to place new biotech platforms or products in their proper global competitive context.

In this respect, the Accelerator model looks particularly interesting. Given the difficulty of pooling investors and management expertise and the relative scarcity of truly globally competitive ventures emerging at the national level, perhaps a pan-European accelerator could be an effective approach. Certainly, if European centers of scientific excellence don't want much of their first-class intellectual property to be hamstrung by underfunding, naive management and unsupportive surroundings, they should seriously consider the concept.

Europe doesn't need more biotech ventures; it needs more successful ones. And starting biotech accelerators would be one means of bringing together the sort of expertise and funding that could increase the chances that that would happen.

