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## THE FIRST WORD

# Growing Biotechnology at the Fringes

The wishful thinking of many local, regional, and national governments runs as follows: (1) *Our nation (or region or town) needs new industry* (depressing statistics on productivity, employment, or crime make this undeniable). (2) *Biotechnology is an area with lots of new and expanding companies* (this, too, is hard to argue with even if it is only during the latter half of 1995 that biotechnology has regained its expansive, confident mood). (3) *These companies have to be somewhere* (perfectly true, as even the most virtually integrated need a legal home where its lawyers and accountants can hang their hats, but flawed). For biotechnology companies, the somewhere they have to be could be anywhere.

And then the courtship begins: the glossy publicity pack, the tours for trade journalists and executives of prospective companies. Looking neither to right or to left, regional development bodies—civil servants all—plant their best feet forward. They woo biotechnology executives with the excellence of the academics in their region, the modernity of its communication infrastructure, the balminess of its climate, and the depth of its financial resolve. A panoply of loans, tax breaks, and grants can be almost be taken for granted. At a recent conference held in Nottingham, U.K., Peter Totterdill and Vanessa Wilkes at the Work and Technology Center of Nottingham Trent University warned that biotechnology is “in danger of becoming quite fashionable in regional development circles.”

Totterdill and Wilkes have been looking at development authorities strategies as part of a European Union-funded scheme. Regional and national development bodies around the world include biotechnology as one of the areas that is central to their plans for rejuvenation. The relatively low capital costs and relatively high value-added per employee make biotechnology an attractive catch. And the newness and changing face of the field mean that even underdeveloped regions might still gather sufficient momentum to compete.

Unusual events or major policy changes can mean that the fragile flower of biotechnology can bloom under erstwhile inauspicious circumstances. The continuing policy of decentralizing French science by the wholesale moving of government institutes away from Paris begun at the start of the decade by former research minister Hubert Curien, for example, has significantly strengthened research in cities such as Montpellier, Nice, and Lyon.

But such changes are rare. In most cases, regions and countries can only hope to improve incrementally on their existing resources. The simple truth is that, despite biotechnology's attractiveness, it is not going to work everywhere.

Totterdill and Wilkes recommend that if regional development strategy is not to be an oxymoron, then the people who formulate and administer the policies must be a bit more conscious of the market they are trying to address. The starting point has to be a thorough and critical audit of a region's resources. This must identify not only its competitive advantages, but also its disadvantages. The correct and early decision for many authorities may well be to forget biotechnology and focus their attention elsewhere.

If they persist, then these organizations should develop some expertise in biotechnology, understanding its differentiation and its dynamics. They also need to work out what additional “carrots” companies would find attractive. Establishing science parks in order to provide biotechnology “starter homes”—a measure proposed by the European Union in its 1992 white paper on European competitiveness in biotechnology to encourage the growth of small companies—is certainly not enough. Science parks are, in essence, exercises in real estate development with the chief beneficiaries being the academic institutes on whose land the park is built. Whatever actions are taken—if they are to be effective—need to be integrated at a national, regional, and even a local level. As all good collaborators in business and research know, good working relationships within a community don't just suddenly materialize, they need to be carefully nurtured and developed over time.

—JOHN HODGSON

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