

A pedigree

17 March 2004 | News



Cambridge and East of England are the premier locations in Europe for life sciences.

Cambridge undoubtedly is the Mecca of biotech not just in the UK, but the entire Europe. It is home to several discoveries. There have been 14 Nobel Prize winners. The discovery of the double helix structure of DNA by Crick and Watson to the Human Genome project at the Wellcome Trust Sanger Centre, there has been cutting edge research work. According to Jeanette Walker, business development manager, ERBI Limited, the industrial biotechnology cluster within Cambridge emerged in the early 1980s in a hi-tech environment created by existing electronics and computing industries.

Initial companies were founded on the Cambridge Science Park (owned by Trinity College, University of Cambridge), which itself was built to attract computing companies. There after there has been no looking back. For example, Domantis, a venture of Dr Greg Winter, founded in December 2000 has around 12 prospect compounds in development internally. Similarly, Astex Technologies founded in 1999, besides working on structural biology is working on drug discovery for companies. Amedis is sighted as another example. It started as a company predicting the toxicological effects of small molecule drugs, but toward the end of 2002, it announced to develop silicon-based drug molecules. Further companies like Acambis, Celltech, and Cambridge Antibody technology have products on the market and late stage development. There isn't any dearth of doing any case studies. Explained Walker, "The entire region is home to a 180 companies. Almost 55 percent of these develop biopharmaceutical products."

Bioscience in the region has been growing on account of availability of research, ventures, and the entrepreneurial culture. Said Walker, "The universities here spinout a large number of companies. In this region, the researchers and venture

capitalists get along very well. There is innovation in funding also. Companies here have attracted close £50 million in 2002. There is investment available at all stages. There is a £1 billion of venture capital within the region from companies like 3i, Merlin, Avlar, and NW Brown. These VCs are sufficiently experienced in dealing with the biotech companies.

Further the region has 12 bespoke research parks. Additionally there have been developments to build more biology and chemistry labs in parks like Cambourne Research Quarter, Cambridge Research Park and the Babraham Research Campus. To top it the area has over 10 biomedical research institutes including the largest Genome Campus in Europe. It has the world renowned Laboratory of Molecular Biology, which is also dubbed as the "Nobel Factory". It also houses Europe's largest campus of agbio, plant, food, and microbial science at the Norwich Research Park and the Institute of Agricultural Crop Research, located in Herefordshire is in this region. Besides there are six top universities with research groups in the life sciences.

While science and venture caps have been the mainstay of the success of the Cambridge and East of England, organizations like ERBI have helped build the right networks. With 260 odd members, ERBI is the largest regional biotech industry group in the UK and provides the access to this regional cluster. All the life sciences companies. It provides not just access to the research, test, and commercialization of products and services, but also helps the new comers to find space, staff, and the bioconsultants in law, finance, IPR, etc.

Size of the bio-community

- 185 biotech companies
- 250 specialist service providers with biotech expertise
- 30 research institutes and universities
- 20 multi-nationals in pharmaceuticals, agbio and food
- 4 leading hospitals involved in research and working with biotech
- ... and over 100 other organizations which take a strong interest in the bio-community

Other facts

- 5 quoted companies by the end of 1995 (Market cap. was £400m)
- 300% growth in quoted companies by 2000 (Market cap. became £7 billion)
- 20% of Europe's publicly traded companies
- Home to half of the UK's top 15 LSE quoted biotech companies
- Home to 25% of Europe's top 50 publicly quoted companies
- £1bn of VC funds available from companies located within the region
- In 2002, there was a base level of nearly 1,100,000 sq.ft occupied by lab-based biotechnology businesses in

Cambridgeshire alone. (With 250,000 sq.ft under construction).

- Growth over the past 6 years has varied between 7-24% per annum with an overall growth in that period of approximately 115% (i.e., approximately 13% per annum).
- 29 publicly quoted biotech companies, 17 UK, 8 US, 2 Canadian and 2 European (excluding pharmaceutical companies)

Employment

- 10,000 people employed directly related to biotechnology business (2002 estimate based on survey - asking numbers of people employed and % of business which is biotech and includes service providers)
- 25,000 people employed in life sciences
- 20,000 people employed by ERBI membership Research
- 13 Nobel Prize winners in medicine and chemistry since Crick and Watson (2 in 2002)
- Over 3,500 students and 350 research groups within life sciences

International companies

- Amgen, Genzyme, Gilead Sciences, US biotech companies all have operations in the region
- 20% of biotech companies have a foreign parent
- GlaxoSmithKline, Merck Sharpe and Dohme operate several major research establishments in the region

Biotech market areas - products and services

- 55% develop (bio) pharmaceutical products
- 10% develop contract or clinical services
- 8% develop human healthcare diagnostic
- 5% involved with agbio development
- 7% develop biotech instrumentation and equipment
- 15% in other areas, e.g. informatics, food, speciality reagents, etc