

BIOTECHNOLOGY CLUSTERS: DUNDEE MEDIPARK

Dundee is the location of one of the fastest growing biotechnology clusters in the UK. The Government supports the development of clusters in particular key sectors of the economy as they can raise productivity and innovation, stimulate competitiveness and lead to company growth. The Dundee Medipark is designed to attract new biotechnology companies to locate in the city.

Biotechnology Clusters

Over the past twenty five years the Scottish economy has changed beyond recognition. Traditional manufacturing industries, such as steel and shipbuilding have declined, whilst there has been growth in new sectors such as electronics and ICT. One of the forces shaping the new economy is the creation of clusters of specialist activities within cities or regions. Clusters have been defined as “geographical concentrations of interconnected companies, specialist suppliers, service providers, firms in related industries and associated institutions” (Sainsbury, 1999).



Dundee Medipark

Clusters are important to a local economy. Where similar types of companies are located in the same area they may compete with each other, raising productivity, or alternatively they may collaborate and share knowledge, ideas and suppliers. This can lead to the creation of firms and an increase in the skills of the local labour market.

Biotechnology is the application of scientific and engineering principles to the processing of materials by biological agents to provide goods and services. A major study carried out in 1999 found that there were more than 270 biotechnology companies in the UK. However, three main clusters were identified in East Anglia, South East England and Central Scotland.

Factors in cluster development

A number of factors have been identified as important to the formation of biotechnology clusters. These are:

- ❑ A strong scientific base
- ❑ An entrepreneurial culture
- ❑ A growing company base
- ❑ An ability to attract key staff
- ❑ The availability of finance
- ❑ Premises and infrastructure
- ❑ Business support services and large companies in related industries
- ❑ A skilled workforce
- ❑ Effective biotechnology networks and associations
- ❑ A supportive policy environment



Site of Dundee Medipark

Dundee

Dundee, situated on the east coast of Scotland, has a current population of approximately 140000. Traditionally an industrial city, known for jute manufacture, Dundee has undergone a renaissance over the last decade. When Dundee City Council launched an economic development plan in 1996 it aimed to establish the city as a regional centre, an employment centre, a centre of innovation and enterprise and a tourist and visitor centre. In particular, the strategy sought to build on the city's growing success in the biotechnology field. The city is very active in scientific research, in its two universities and the Scottish Crop Research Institute and it has seen the creation of a number of spin-off companies from this research. Many of the key factors important in biotechnology cluster development identified above are therefore in place in Dundee.



Dundee Medipark

Biotechnology companies currently based in Dundee include:

DSS Medicines Research Ltd
Axis - Shield
Cyclacel Ltd
Cypex Ltd
Iatros Ltd
Karl Storz Ltd
Alchemy Laboratories Ltd
Grampian Pharmaceuticals Ltd
Tayside Pharmaceuticals
Gentech Propagation Ltd
Mylnefield Research Services



Dundee Medipark

A marketing partnership has been created by Dundee City Council, Scottish Enterprise Tayside, the city's universities and the private

sector, called BioDundee. BioDundee aims to ensure that Biotechnology in Dundee has the necessary profile locally, nationally and internationally. For more information on BioDundee you can view the website at www.biodundee.org

Dundee Medipark

In order to encourage further growth of the biotechnology cluster, local agencies in Dundee identified the need for a new type of specialist business park to provide the necessary premises and infrastructure for biotechnology firms wishing to locate or develop in the city.

Dundee Medipark has been developed by the local enterprise company, Scottish Enterprise Tayside, and Dundee Teaching Hospitals Trust with financial support from the European Union. It is located on a 22 acre greenfield site adjacent to Ninewells Hospital and Medical School on the western edge of the city. It is close to Dundee Airport, which operates flights to London, and the A90, the main trunk road to the central belt of Scotland. It is estimated that there are in excess of 1500 biomedical researchers working within a 3 mile radius of the park.

The objectives of the Medipark are:

- ❑ To provide an environment for projects and companies spinning out from the Hospital and Medical School;
- ❑ To allow companies from overseas to locate their research and development activity where they can benefit from research interactions; and
- ❑ To increase the awareness of and interest in commercialisation and technology transfer among the research community.

The types of uses allowed onto the site are research and development, production of medical devices, the carrying out of clinical trials and university related projects. Building design within the Medipark is regulated to ensure that its quality is in keeping with the high standard of landscaping. Sites are available for sale or lease on competitive terms.

Discussion

Biotechnology is a new field providing exciting opportunities for company growth and job creation. While it appears that the development of biotechnology clusters, as found in Dundee, is primarily driven by market factors how do you think that local development agencies can play a role in encouraging the formation and growth of clusters?

Further Information

Lord Sainsbury, 1999, *Biotechnology Clusters*, HMSO, DTI
www.biodundee.org