LIFE SCIENCES

Technology Cells

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Professor Peter Downes, Principal and Vice-Chancellor of the University of Dundee

What has been achieved in life sciences at the University of Dundee has been one of Scotland's great academic, research and economic success stories of the past 20 years. From a small team of scientists working in a converted horse stables, the College of Life Sciences at Dundee has grown into what has been described as a `citadel of science' overlooking our spectacular setting above the River Tay.

Professor Peter Downes

Dundee now has an international reputation as a centre of excellence and ranks particularly highly when measured on the impact of research – Thomson Scientific recently ranked Dundee as the top university in the world for pharmacology. Aberdeen, Glasgow and Strathclyde also featured in the top 20, so obviously we are doing something very well in Scotland.

How has this been done? In Dundee it has been about building a critical mass of expertise, something that others aspire to but which is difficult to achieve. We have concentrated for many years on bringing the very best people here in focused areas of excellence creating world class teams. The facilities we have developed are excellent but it is the people who fill them who make the real difference.

Some of the most cited and most respected life scientists in the world are at Dundee, people like Sir Philip Cohen, Dario Alessi, Mike Ferguson, David Lilley, Alan Fairlamb and Doreen Cantrell. Joining them in Dundee is a real `league of nations' – of 800 scientists and support staff in the College of Life Sciences around one-third are from overseas, with 55 different nationalities represented.

The wider effects of this have been notable. The University's activities have been a catalyst in attracting biotech companies to Dundee and Scotland. We have also successfully engaged directly with the pharmaceutical industry in projects like the Division of Signal Transduction Therapy, a collaboration with several of the world's biggest pharma companies which has been running since 1998 bringing inward investment of around £40 million and regarded as a model of how universities should collaborate with the commercial sector.

The net effect of all this is that life sciences has grown to occupy more than 16% of the local economy in and around Dundee.

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The University is also dedicated to providing real benefits to society around the world. Much of the research is leading to breakthroughs in disease areas such as cancer and diabetes. This concentration on translating the fruits of research into clinically effective treatments has attracted pharmaceutical giant, Wyeth (which has merged with Pfizer to create the world's largest pharmaceutical company) to support the Translational Medical Research Collaboration involving the Universities of Dundee, Aberdeen, Edinburgh and Glasgow. In addition, Dundee's innovative Drug Discovery Unit was established to find new treatments for neglected diseases such as African Sleeping Sickness and leishmaniasis that affect millions of people in the developing world.

It has proved that Dundee can be a global player in life sciences. And the same applies across Scotland – Aberdeen, Edinburgh and Glasgow are all cities with considerable strengths in life sciences which have placed the country at the forefront of a very prominent sector.

The challenge is now to maintain that position. The competition from other countries – both those with long established science capability, but also from emerging powers – is fierce. To stay ahead of the game will require further investment, determination and dedication but it is a task we are committed to. Dundee is starting from a position of considerable strength, and we must build on that for years to come.

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