Scotland among the best in the world for life and chemical sciences research

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A new benchmarking report on the performance of Scotland’s research base in life and chemical sciences has revealed that the average impact of Scottish life and chemical sciences research is among the best in the world, with Scotland boasting some of the most productive and influential researchers in both fields.

The independent report carried out by Elsevier, the world’s leading provider of health and science information, was commissioned by Scottish Enterprise to review the performance of the Scottish research base in chemical and life sciences compared to the rest of the world. It investigates the collaboration between the technology, innovation, chemical and life sciences sectors and reveals that Scottish researchers are efficiently converting funding into world class research and patents.

Other key findings from the report show that:

• Scotland is one of the most efficient in the world at managing and using research resources
• Scotland shows high and increasing levels of international collaboration in life sciences, from 35.7% in 2001-2006 to 45.4% for 2007-2012.
• Researcher for researcher, Scotland produced more publications and citations than most comparator countries, in 2010
• Occupying top 2 and 3 spots in the rankings for publication per researcher and citation per researcher in life sciences, Scotland substantially outperformed Germany, France and the UK
• Over 11% of Scotland’s life sciences papers published in 2007-2012 were ‘star publications’ featuring in the top 5% of most influential papers published - out performing the UK, and EU27.
• Scotland produced nearly 2000 Chemical science publications in 2011.
• Chemical sciences’ researchers are highly prolific and are publishing more material ranked in the in the top one percentile globally.
• Scotland shows high and increasing levels of international collaboration in chemical sciences, from 40.5% in 2000-2005 to 49.9% for 2006-2011
• 9.4% of Scotland’s chemical sciences papers published in 2006-2010 were ‘star publications’ featuring in the top 5% of most influential papers published - out performing the UK, Sweden and the USA.

Commenting on the report, Julia Brown, director of chemical and life sciences, Scottish Enterprise, said: “Life and chemical sciences are vital to Scotland’s long-term economic growth, contributing over £3.1 billion and £9.3 billion respectively to our economy on an annual basis.

“This report builds upon Scotland’s prominence as a hub of life and chemical sciences. That we are continuing to punch above our weight in terms of both research and researchers, is testament to Scotland’s reputation as the ideal partner of choice in major international projects in both of these fields.”

To read the full reports visit our website below:

• Life Sciences Research
• Chemical Sciences Research

NOTES TO EDITORS

About Scotland’s chemical sciences sector

An important contributor to the Scottish economy, Scotland’s is home to around 200 chemical sciences companies employing some 14,000 people directly and 70,000 indirectly, and which generate over £9 billion each year. The sector is Scotland’s second top exporter, with exports worth almost £3 billion and accounts for 25 per cent of Scottish manufacturing by turnover.

Scotland is home to 13 universities and six colleges which have research and teaching excellence in chemistry and engineering in Scotland, and together they produce 500 graduates per year. Four of the UK’s top 10 chemistry departments are in Scotland.

Chemical Sciences Scotland is a unique partnership of industry with Scotland’s world-renowned academic sector and government agencies. Its aim is to ensure the chemical sciences have a vibrant future, creating high value opportunities for skilled people and innovative companies.

The chemical sciences are at the heart of Scotland’s economy and underpin its key life sciences, energy, chemicals and electronics industries. For more information log on to www.chemicalsciencesscotland.com

About Scotland’s life sciences sector
Scotland's life sciences sector plays a key role in the Scottish economy with more than 640 life sciences organisations generating £3 billion annually and employing some 32,000 people including 11,000 research staff across 57 universities and research institutes. According to the UK Life Science Start-up report 2010, Scotland has the highest rate of life sciences start-ups per capita in the UK (2005-2009).

Today Scotland’s life sciences sector is largely focused on human healthcare – making up around 75 percent of the activity.

Scotland is a key centre for life sciences in Europe, with major strengths in medical technology, clinical and translational medicine, pharmaceutical services and regenerative medicine. Agricultural, veterinary, industrial and marine biotechnology all feature strongly also.

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**Scottish Enterprise** is Scotland's main economic development agency and aims to deliver a significant, lasting effect on the Scottish economy. Our role is to help identify and exploit the best opportunities for economic growth. We support ambitious Scottish companies to compete within the global marketplace and help build Scotland’s globally competitive sectors. We also work with a range of partners in the public and private sectors to attract new investment to Scotland and to help create a world-class business environment.

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