

UK and US: partners in science and innovation in a global economy

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In an increasingly global economy, scientific invention and innovation are critical to the United Kingdom's long-term competitiveness, prosperity and security.

The United States remains at the centre of global science, technology and innovation. The total flow of R&D investment between the UK and the US is larger than between any other two countries in the world – approximately £2.2 billion in each direction. With only 5% of the world's population, the US accounts for 44% of the combined R&D spending of the 30 OECD countries. Public and private research and development funding in America reached a record \$328 billion in 2005. The US attracts many of the world's best scientists and engineers and remains the world's leading producer of innovative products.

That is why of the 75 dedicated Science and Innovation Officers in 22 countries around the world, nearly a sixth of them are based in the US. And the majority of these officers are located close to the powerhouses of US innovation and scientific research, where universities, government laboratories, industrial laboratories and small businesses merge into regional centres of excellence: Boston, San Francisco, Houston, Los Angeles and Atlanta, as well as Washington DC.

The scope of our US Network is bound by a set of objectives intended to ensure that the Officers are working effectively at the cutting edge of science. These currently include work on homeland security technologies, stem cell research, innovation and technology transfer, pandemic contingency planning, climate change science and new energy technologies.

The UK's science base and our innovation industries are held in high regard in the US, a reputation that has been strengthened by recent developments. In the past year, biomedical research has progressed rapidly with government support. For example, the £100 million UK Stem Cell Initiative shows our American colleagues that the UK intends to maintain its lead in this field through pioneering endeavours such as the UK stem cell bank and the establishment of a public-private consortium to use stem cells to enhance drug discovery and development. The UK has also achieved remarkable results in space science with the landing of the Huygens probe on Titan, in nanotechnology with the development of new architectures for devices in biomedicine and information technology and in ICT with the award-winning Visa4UK system.

Our S&I Officers and Public Affairs Officers have used these accomplishments, among others, as leverage to forge connections with American research centres, universities, government programmes and private industry in their patches.

Through introductions made by Atlanta's S&I Officer, three UK genomics/proteomics networks and a University of Georgia-led consortium have agreed to form a global alliance to further research into the area of structural genomics and proteomics.

In San Francisco, the S&I team's activities have brought UK collaboration with the fledgling California Institute for Regenerative Medicine, responsible for \$3 billion of stem cell research funding, to a new level.



Houston S&I has organised a US-UK Conference on Climate Change science and policy with FCO support, and a visit for key US climate scientists and government representatives to participate in the Climate Agency conference in London.

Our team in Washington has led the Network on UK-US collaboration under the S&T Agreement for homeland security: for example, working with the Home Office and British Defence Staff, to advance a promising new line of UK-US collaboration vital to the security of both nations.

In March 2006, the Network organised a visit to Washington DC and New York by the House of Commons S&T Committee as part of the Committee's inquiry into how Government uses scientific evidence for policy making. The Committee, chaired by Phil Willis MP, received a variety of views from Congressmen, senior US Government officials and representatives of many non-governmental bodies.

The importance of the United States for the advancement of science cannot be underestimated; the FCO will continue to develop its S&I Network in the US to ensure that the United Kingdom is not only aware of the developments coming from across the Atlantic, but also takes advantage of every opportunity for collaboration and knowledge exchange.

In an ever-broadening global economy, strong partnerships such as these will be essential for the development of the UK economy, and the science base that increasingly lies at its heart.