## OBAMA – "WE WILL RESTORE SCIENCE TO ITS RIGHTFUL PLACE"

In his inauguration speech on 20 January, Barack Obama promised to "restore science to its rightful place" - a statement applauded by the science community in the US and worldwide. But what is behind the headline message? And can he deliver on his promises? Brian Ferrar, Head of the US Science and **Innovation Network** at the British **Embassy in Washington reviews** the campaign promises and the action taken so far.

Obama's commitment to science was a significant plank of his election campaign. Advised by a team of scientists including Nobel Prize winner Harold Varmus, he was the only Presidential candidate to produce a comprehensive science and innovation policy platform. He promised to restore scientific integrity to Government, substantially increase funding for science, and encourage innovation. This became apparent at an **Economic Competitiveness** 

Summit he hosted at Carnegie Mellon University, Pittsburg in June 2008. Moderating a discussion among 13 industry, education, community and scientific leaders, including Varmus, Obama showed his clear grasp of the issues at stake and his vision of science as a vital component in restoring US competitiveness in the face of competition from emerging economies. He also recognised the central role of science and technology in meeting the sustainability and resource challenges of the 21st Century, including energy and climate security.

Shortly after his election Obama announced that Prof John Holdren, renowned for his work on climate and energy, would become Assistant to the President for Science and Technology and Director of the Office of Science and Technology policy. The timing of the announcement was far in advance of previous Presidencies and widely welcomed by the US science community. The fact that Obama had restored the position as Assistant to the President was also taken as a sign that Obama was serious about science, as were his appointments of Holdren, Varmus, and MIT's Eric Lander as co-chairs of the President's Committee of Advisors on Science and Technology. Other appointments confirmed this trend with Nobel Prize winner Steve Chu becoming Energy Secretary and Royal Society member Jane Lubchenco

heading the National Oceanic and Atmospheric Administration. There has, however, been some disappointment that Holdren is not at Cabinet level — a position held by his predecessors prior to Bush's presidency.

The appointments presaged new policies. Within 50 days of his inauguration Obama made two significant science announcements. First, he overturned President Bush's ban on Federal funding for embryonic stem cell research using lines created after August 2001. Second, he instructed Holdren to prepare a strategy for restoring scientific integrity to all aspects of the executive branch's involvement with scientific and technological issues. Whilst the change in stem cell policy took the limelight, arguably the science integrity proposal was more significant. It fulfilled a key plank of his election platform. The proposal asserts that all science posts be filled based on people's scientific credentials; that the scientific evidence underlying policy is developed using established scientific methods and made public; and that the necessary scientific processes within agencies are upheld.

Obama has also promised to double basic research funding over ten years and has put this in his 2010 Budget proposed to Congress. Many US science agencies have languished with flat budgets in recent years. The National institutes of Health (NIH), the National Science Foundation and the National

Institute of Science and Technology have been constrained in their funding due to the inability of Congress to deliver on increased funding promised in the America COMPETES Act. In addition, in the stimulus bill passed in February a one-off \$21.5 billion was allocated for science, including \$18.5 billion for research. Nearly half has gone to NIH, including \$8.5 billion for research. This stimulus will enable NIH and NSF to fund previously submitted quality research proposals that were unfunded solely due to lack of funds. NIH has also issued some new calls for proposals, but in a change to its normal policy, and in line with the intentions of the stimulus bill, overseas researchers can only apply as minor partners of US researchers. Overseas researchers will, however, be able to continue to apply direct under normal funding calls.

The economic and financial crisis has deepened since Obama's ambitious funding proposals were first outlined, and will almost certainly undergo revision along with other spending programmes. Nonetheless, the overall signals on science are almost wholly positive. Obama has already begun to deliver on his promises. The US science community is excited. The FCO/DIUS Science and Innovation network and RCUK Office in the US are also ensuring that UK researchers can collaborate with US researchers and access US funding.