Trust Wellcome for your Research Funds

Michael Gross

The Wellcome Building

Up and down the British Isles, many biomedical research institutes and university departments have a Wellcome laboratory or floor, some have even a Wellcome wing or an entire Wellcome building. And when it was confirmed on April 14th that the publicly funded human genome sequence was finished to within the the pre-defined completeness target, it emerged that around 30 % of the bases sequenced come from the Wellcome Trust Sanger Institute at Hinxton near Cambridge.

These are only the most visible signs of the work of one of the largest biomedical charities in the world. The trust, like the company known as the Wellcome Foundation, arose from the legacy of the entrepreneur Henry Wellcome (1853–1936). Essentially, Wellcome merged several companies he was involved with into the Wellcome Foundation, and arranged for his shares to be held by the Wellcome Trust after his death. After upholding the link with the company for nearly six decades, the trust diversified its assets in the 1990s and eventually sold the company to Glaxo plc.

Even though the recent slump in stock markets has reduced the current value of Henry Wellcome's endowment by a few billions pounds (from £12 billion in 2001 to £9.3 billion in 2002), the trust can still afford to plough nearly half a billion pounds into research annually, making it the largest provider of funds for biomedical research in the UK. Its mission is "to foster and promote research with the aim of improving human and animal health." To achieve this, the trust will support a wide range of projects, ranging from individual post-doc and career development fellowships through to major infrastructure or institute grants up to and including the Sanger Institute's genome effort.

Funding the Genome

The Sanger Institute, founded in 1992 as a UK focus of the international efforts to sequence the genomes of mouse, man, and other species, might be called the flagship of the Trust's research base. It has sequenced nearly a third of the (publicly funded) human genome, and a fifth of that of the mouse, and has made significant contributions also to the genomes of zebrafish and a number of microbial pathogens. In the 2000–2005 financial framework ("Planning for the future", available from www.wellcome.ac.uk), the trust has set aside a tenth of the 3 billion pounds budget for this research and follow-up post-genomic research activities.

Almost double that amount was committed to building projects that are designed to generally improve the infrastructure for scientific research. In the Joint Infrastructure Fund, the grants given by the trust in partnership with the UK government and its research councils are often used as a lever to make government money available. For instance, the trust might approach the government with the plan to invest significant funds into a major building project on condition that the government matches the amount.

Examples of infrastructure projects include the Diamond synchrotron project, which will provide the UK with a new third generation synchrotron based at the Rutherford Appleton Laboratory

and replaces the old synchrotron at Daresbury. Wellcome Trust has contributed £110 million to the Diamond project, which is part funded by the Trust in partnership with the UK and French governments.

Further important areas of research funding by the trust include the baseline funding, which is essentially about grants that scientists applied for and makes up 40 % of the trust's research budget. Another 10 % of the current five-year finance plan are committed to the continuing support of existing fixed-term projects, and 6 % go to Wellcome Trust Centres, some of which are located in developing countries, e. g. the Africa Centre in KwaZula, Natal, S Africa, which predominantly conducts research into HIV/AIDS, and the Kenya Unit in Kilifi, on the Kenyan East Coast, which carries out leading research into malaria. With all these amounts tied up, it is obvious that the trust must have some instruments to be able respond dynamically where new research fields arise. Therefore, 9 % of the current finance plan have been set aside for "emerging research opportunities."

Another important part of the trust's activities is its "public engagement" which aims at fostering an informed dialogue on science. This includes promoting cross-cultural events of the "science and art" type. One interface for such dialogues is the small exhibition room, the Two10 gallery, which the trust operates just across the road from its main head quarters in the Wellcome Building.

New Challenges

Even though the five-year finance plan worked out under the leadership of Mike Dexter and published in November 2000 has succeeded in confirming the trust as a major player in research funding in the global arena, there are new challenges and changes ahead. Changes, most obviously, in the physical and personal. On West London's Euston Road, just on top of Euston Square tube station, a new building takes shape to house the trust's headquarters from 2004. During the past 10 years the Trust has grown considerable and staff are spread over a number of sites. The new HQ will bring all staff together and enable the Trust to further open up the Wellcome Building for public activities – exhibitions, library resources – which form part of its public engagement activities. And Professor Mark Walport, currently head of medicine at London's prestigious Imperial College, is going to be the trust's new director from June onwards, with a five year tenure and an option for a further two years. Walport is already familiar with the trust, as he served on the board of governors since Oct 2000). He replaces Mike Dexter, who retired in March after five years at the helm. Looking back on his Wellcome years, Dexter says: "It was a tremendous wrench to leave the Trust and I enjoyed my time there thoroughly. It is one of the most exciting jobs in science."

New challenges for his successor may arise from the trust's interaction with the politics of research. As one of the biggest investors in British science, but by no means tied to the UK as a matter of principle, the trust has a unique power to influence the British government into doing its bit to support science in the UK. Should the government turn off the cash flow for research and embark on measures that would endanger promising new technologies such as stem cell research, there is nothing to stop the trust from moving its investment in science to other countries where the conditions might be more favourable to the trust's mission. Wellcome may be a giant, but it retains the flexibility required to stay on top of the fast-moving game that is biomedical research.

Weblinks: www.wellcome.ac.uk

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