Wellcome Trust Work in the Funding of Research: Trends and Challenges

Dr Mark Walport
Director
Wellcome Trust
The Wellcome Trust

- an independent research-funding charity

- established 1936

- funded from private endowment

- managed for long-term stability and growth
Mission

“To foster and promote research with the aim of improving human and animal health”
Strategic Plan 2005-2010

Wellcome Trust today
Key player

- asset base valued at £12 billion (September 2005)
- spend in 2004-5 of just under £460 million
- estimated spend in excess of £2 billion over next 5 years
Fostering biomedical science

- ensure the single biggest element of our funding supports investigator-led research and career fellowships
- retain around 10% of funding each year to respond flexibly to unanticipated opportunities
- continue to support the Wellcome Trust Sanger Institute as a world-leading centre for genomics research
The difficult art of giving…

“I am in trouble Mr Gates… The pressure of these appeals for gifts has become too great for endurance….I am so constituted as to be unable to give away money with any satisfaction until I have made the most careful enquiry as to the worthiness of the cause. These investigations are now taking more of my time than Standard Oil itself.”

What foundations can do...

• independent
• ask difficult questions
• leverage
• take a long term view
• apolitical advocates
• good partners
Independence

Human Genome Project

• gold standard sequence
• provides the foundations of genome sequence and genomic variation
• Sanger Institute world leading centre for the analysis of genomes; home of the EBI
• free global access to sequence data on the internet, regularly updated and annotated
Ask difficult questions
National Survey of Sexual Attitudes and Lifestyles

- Margaret Thatcher refused use of public funds
- major improvements in our understanding of the spread of sexually transmitted disease
PPPs – after the human genome

SNP and HapMap consortia

• International SNP consortium
  - sequenced 10m SNPs

• International HapMap consortium
  ▪ genetic factors in disease, gene-environment interaction, response to drugs
  ▪ already being used to study malaria, age-related macular degeneration, type 2 diabetes, asthma, dyslexia, drug metabolism and adverse effects

• free global access through the internet
PPP:
Structural Genomics Consortium

- £48 million consortium between UK, Canada and Sweden
- to determine structures of over 400 proteins relevant to human medicine
- find new drug targets for cancer, inflammation, osteoporosis and diabetes
- provide research tools to learn more about how protein structure relates to function
PPPs – unmet need
Medicines for Malaria Venture

Exploratory  Discovery  Preclinical  Clinical Development

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<td>Pf enoyl-ACP reductase (Fab I)</td>
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<td>Pf protein farnesyltransferase (Pf-PFT)</td>
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<td>Next Generation (OZ)</td>
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- New Projects to be added
- Projects in the GSK/MMV mini-portfolio
• Traffic-Related Injury in the Pacific Project (TRIPP)
• estimation of the burden of injury in Pacific nations
• identification and quantification of major risk factors for motor vehicle injury
• inform the priorities for road traffic injury prevention interventions
Commitment to long-term support to carry out vital research on malaria and other diseases, which cause high levels of mortality in the tropics

Kenya Medical Research Institute
Kilifi/Nairobi
Kenya

Mahidol University, Thailand &
Hospital for Tropical Diseases,
Viet Nam

University of Malawi
Blantyre
Malawi
Advocacy

EU Physical Agents Directive
(electromagnetic forces)

• PAD (EMF) 2004/40/EC adopted by EU in April 2004
• April 2008 limits placed on the EMF exposure of workers
• could seriously limit the use of MRI for clinical and research purposes
• could prohibit interventional MRI and research with new, more powerful high-field scanners
• EU wide opposition
Advocacy

Open access

- partnership initiative with National Library of Medicine
  - to develop a PubMed Central portal in the UK that will create a stable, permanent digital archive of peer-reviewed biomedical research publications that is accessible for free via the Internet
  - in collaboration with DH, MRC, BBSRC, JISC, Cancer Research UK, British Heart Foundation, Arthritis Research Campaign, AMRC, Scottish Executive
  - mirror the data from USA, Japan, France – collaboration and competition

- UKPMC running and accepting papers by end of 2006
What foundations cannot do…

• substitute for Government
• enter into open-ended funding commitments
• work without financial commitment from other partners
• work without consent
• everything
Foundations – a challenge

“I believe that, after the first generation, inherited wealth loses the spirit and values of the people that earned that wealth……….The culture of those in charge becomes not too dissimilar from the culture of the government bureaucracies who dispense funds confiscated from the taxpayer.”