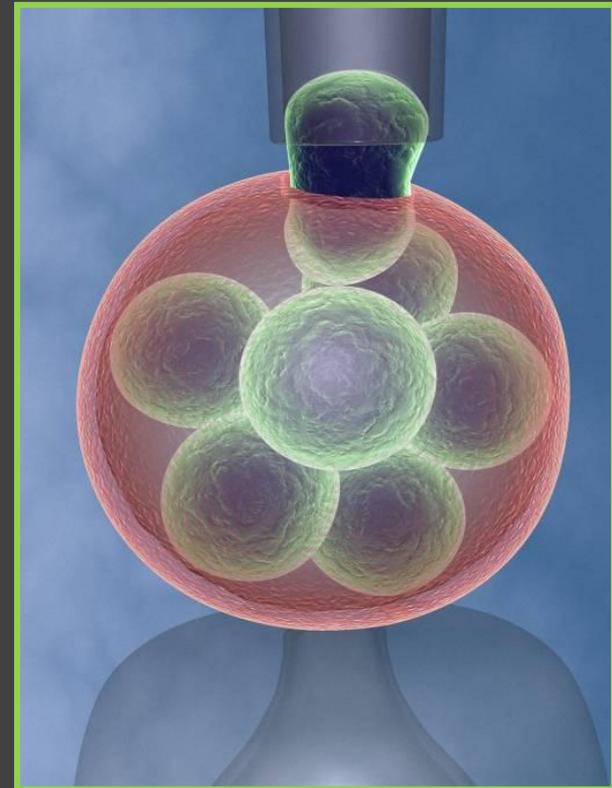


# Wellcome Trust Funding – New Directions

Michael Dunn

*b.debate BCN  
10<sup>th</sup> May 2012*



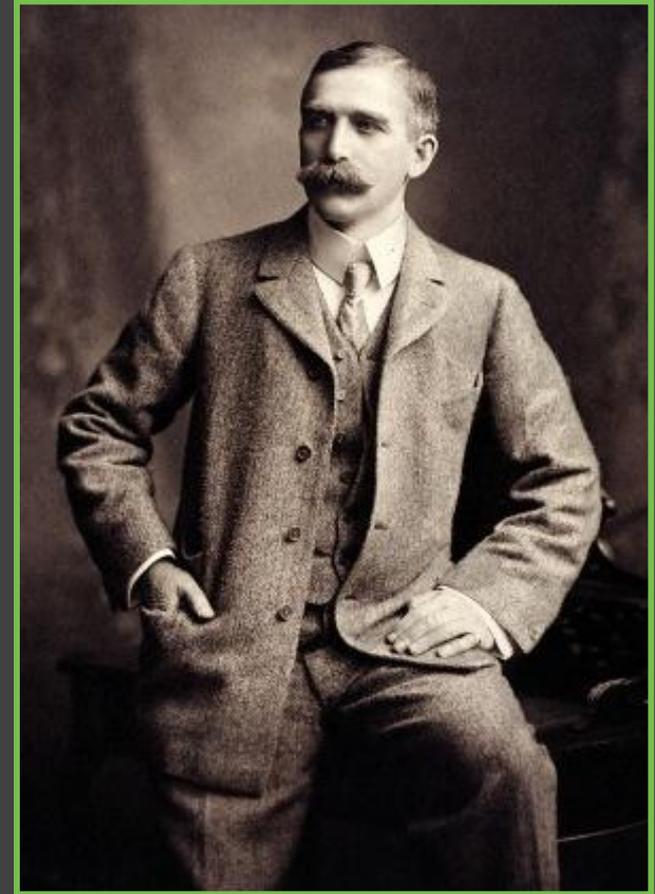
# The Wellcome Trust

- We are a global charitable foundation dedicated to achieving extraordinary improvements in human and animal health.
- Our interests range from science, to the history of medicine, to public engagement.
- We are independent of both political and commercial interests.



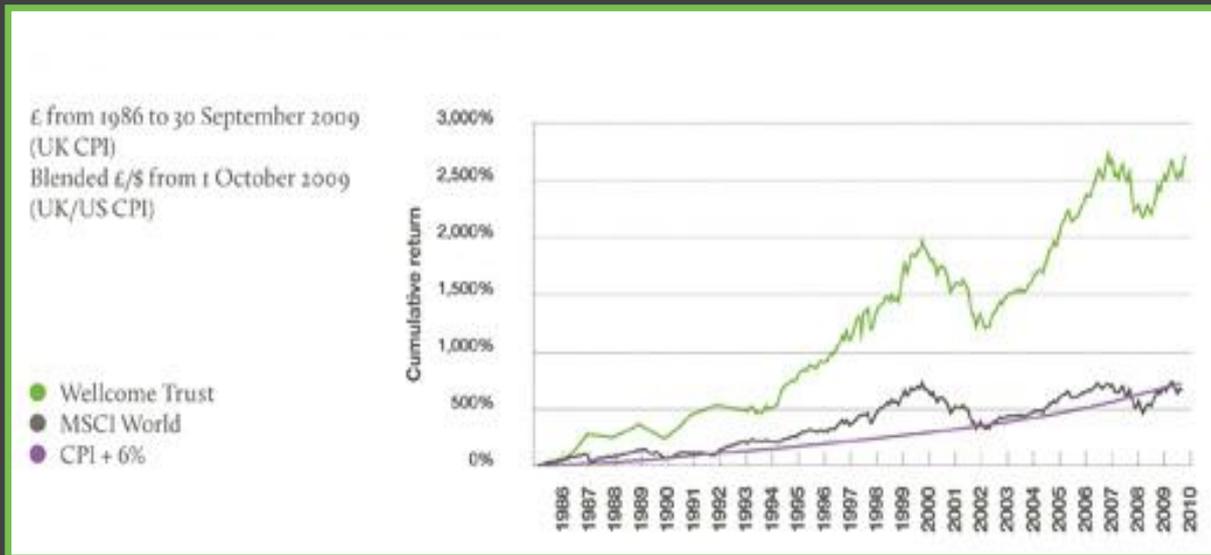
# Our History

- The Wellcome Trust was set up in 1936 under the will of **Sir Henry Wellcome**, who vested the entire share of his pharmaceutical company, The Wellcome Foundation, in a charitable trust.
- The income from the Trust must be used to:
  - Advance medical and scientific research to improve mankind's wellbeing
  - Increase the understanding of the history of medicine
- The Trustees began work in 1937 with **£73,048** in their deposit account.



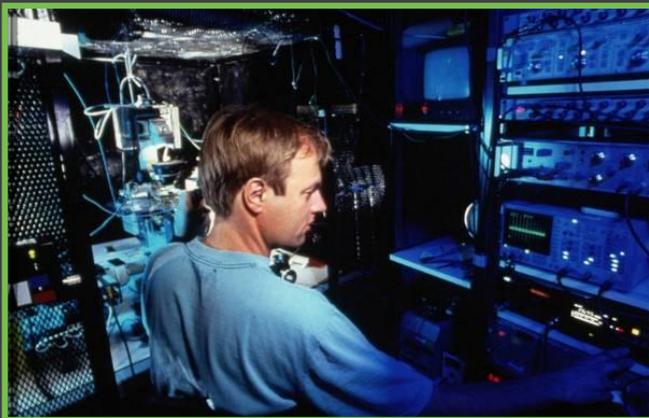
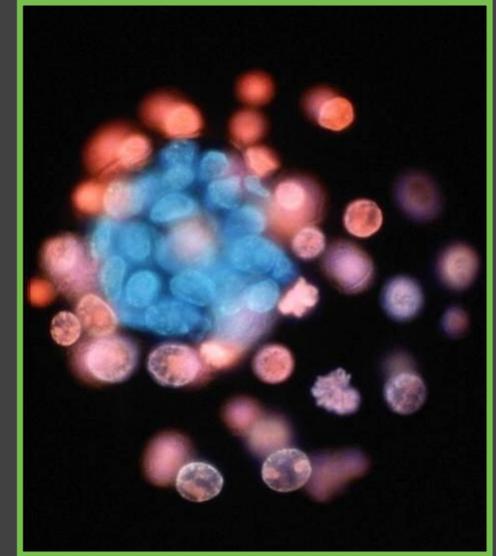
# Our Income

- Our Invested Endowment is currently worth around £14bn.
- Investments in property, public and private equities, hedge funds, property and cash.
- We spend over **£600 million** on charitable activities per year.



## Our vision and mission

- Our **vision** is to achieve extraordinary improvements in human and animal health.
- Our **mission** is to support the brightest minds in biomedical research and the medical humanities.

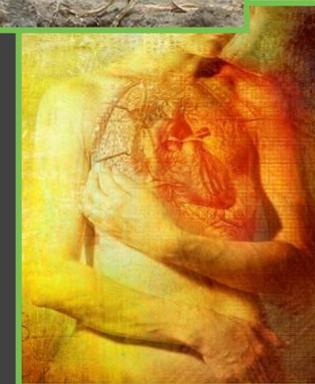
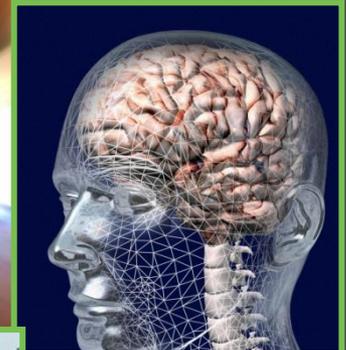


## Focus areas

- Supporting outstanding researchers.
- Accelerating the application of research.
- Exploring medicine in historical and cultural contexts.

# Five strategic challenges

1. Maximising the health benefits of genetics and genomics.
2. Understanding the brain.
3. Combating infectious diseases.
4. Investigating development, ageing and chronic disease.
5. Connecting environment, nutrition and health.



# Our Role

*“....simply put, the best way to administer a creative research environment is to find people of great talent and reasonable ambition – whatever their specific disciplines – and leave them to their own devices”*

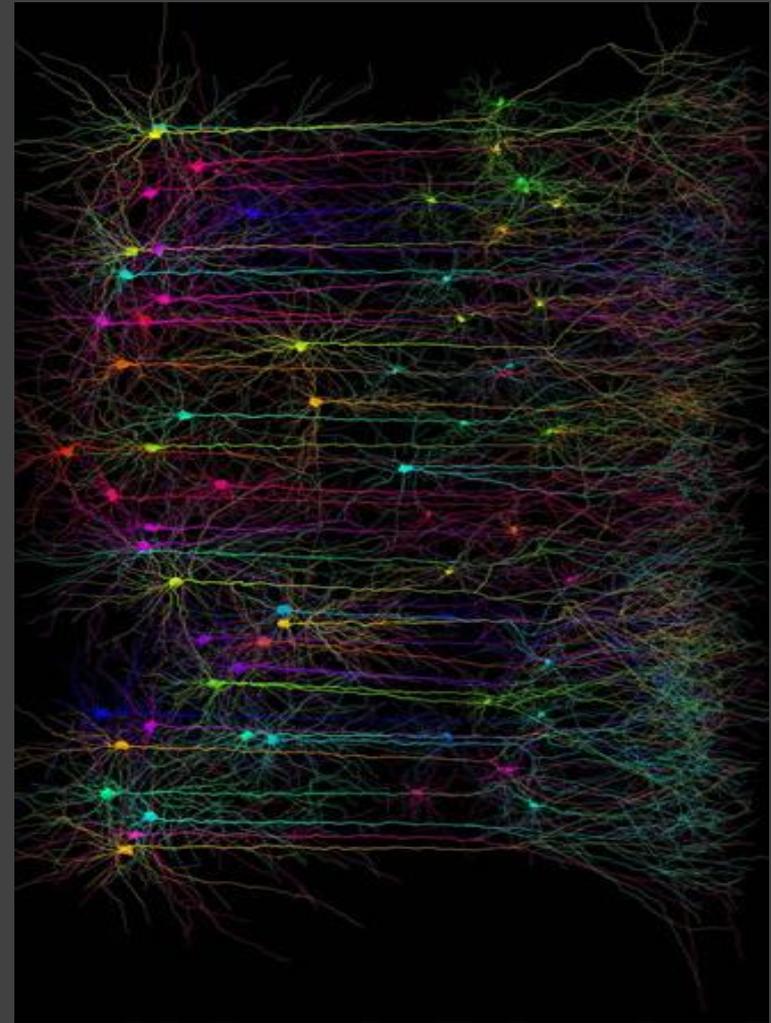
**Joshua Lederberg, *The Scientist*,  
1991**

# Our Values

- independent
- global-funder
- long-term
- people-focused
- partnership
- catalytic

# The Funder's Role

- funder's strategy
- decision making
- research environment
- evaluation & assessment
- regulatory environment



# Strategy

- ideas, people, or institutions?
- early-, mid-, late-career?
- short, medium or long-term?
- Wellcome Trust funding:
  - Investigators
  - Fellowships
  - Strategic Awards
  - Institutional Strategic Support Fund

# Grant funding schemes in biomedical science

## Personal support for outstanding researchers

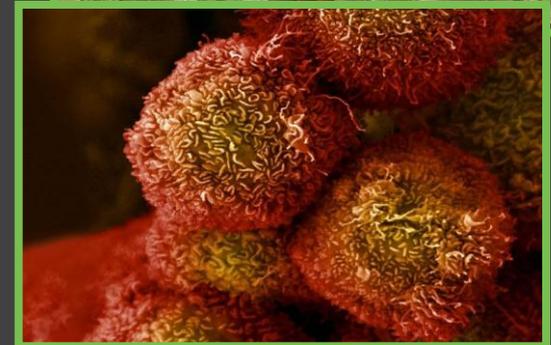
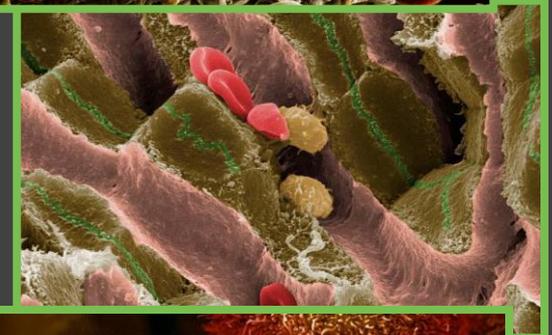
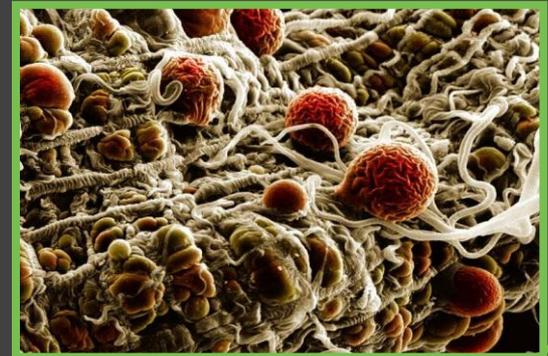
- Investigator Awards
- Fellowships

## Large-scale collaborative multidisciplinary projects

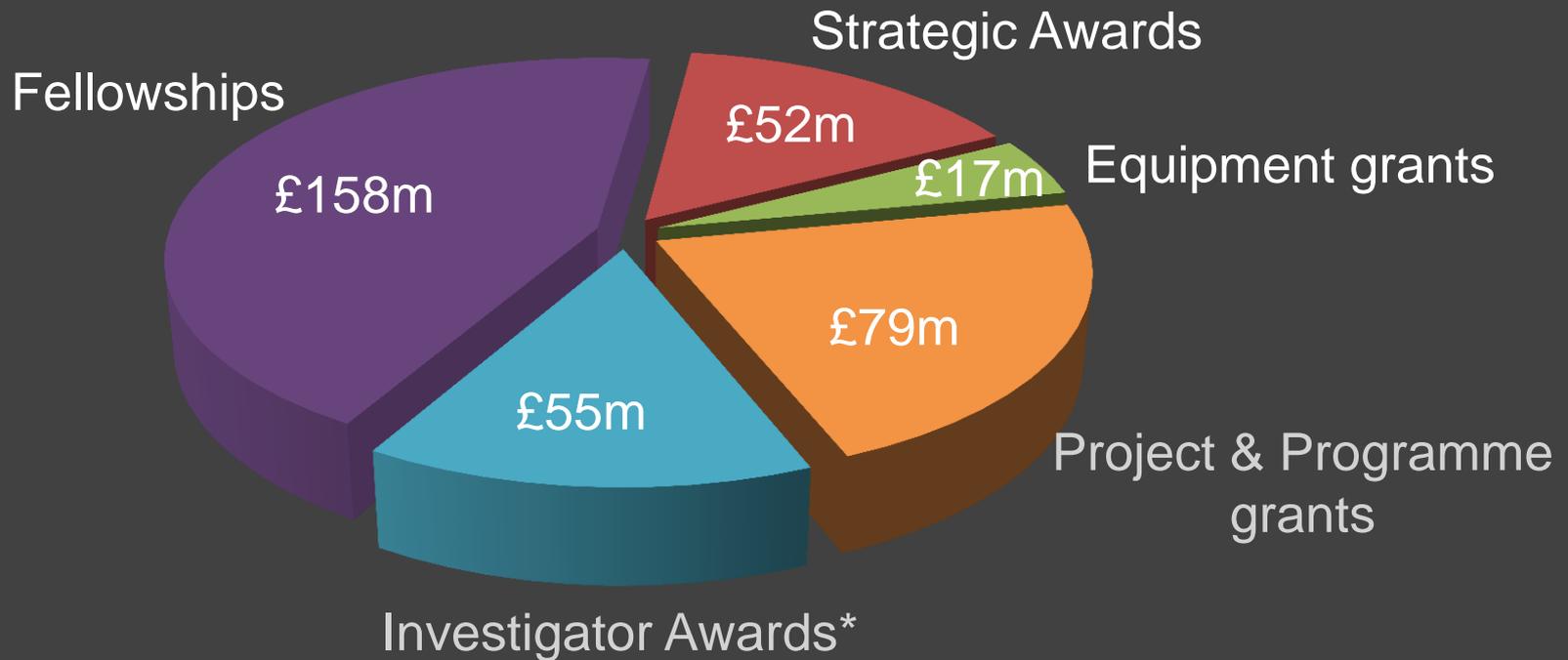
- Strategic Awards

## Equipment & Resources

- Biomedical resources
- Multi-user equipment grants

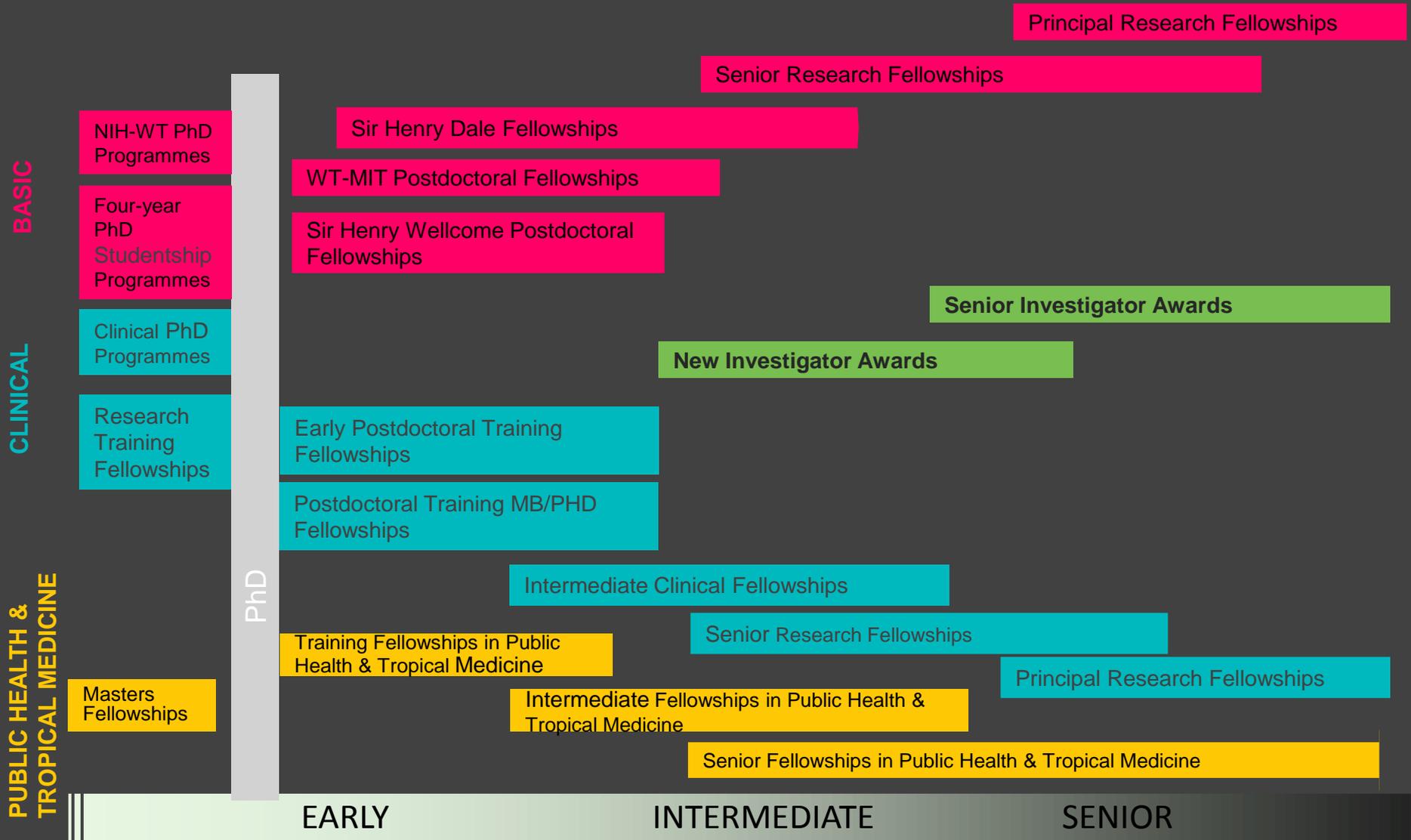


# Biomedical Science Grant Funding 2010/11



\*Investigator Award funding for half-year only

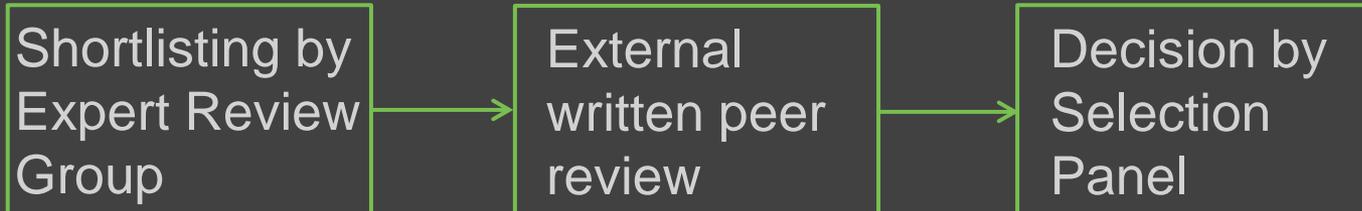
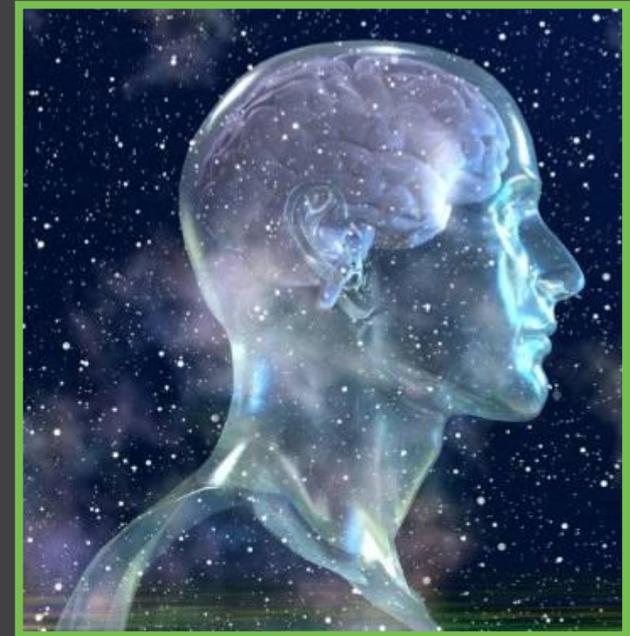
# Support for individual researchers



# Investigator Awards

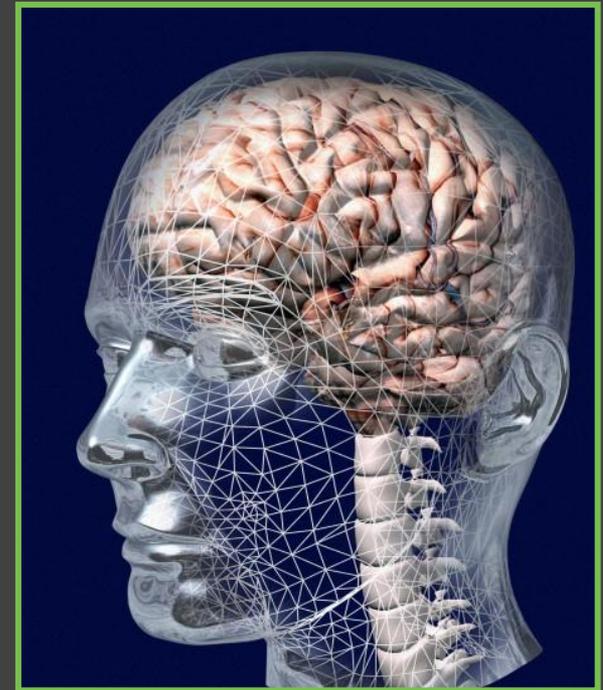
# Key Features

- For researchers who have established academic posts.
- New & Senior Investigator Awards.
- Research question drives value and duration of award
- Awarded by peer review.



# Assessment Criteria

- The track record of the candidate.
- The quality and importance of the research question.
- The approach to solving these questions.
- The suitability of the research environment.
- How the proposed research addresses our Strategic Challenges.



# What is provided?

- Anything up to £425,000 per year.
- Up to 7 years.
- Direct costs of research:  
salaries, equipment, travel, consumables,  
animals, fieldwork.



# What makes a strong IA application?

- Important ideas that will make a difference to your field
- A clear, articulated research vision
- Sufficient substance for reviewers to understand:
  - What you aim to do
  - How you plan to do it
  - Whether it is likely to work.
- Access to required collaborations, resources and technology
- A track record that provides evidence you can achieve what you propose to do

## Some Investigator Award holders

Peter Donnelly, University of Oxford  
£3.1m over 7 years for *“Statistical methods for the development and analysis of genomic data in health and disease”*.



Alister Craig, Liverpool School of Tropical Medicine  
£1.5m over 5 years for *“Cytoadherence-mediated pathology in cerebral malaria”*.

Christiana Ruhrberg, University College London  
£1.1m over 5 years for *“Defining signalling pathways that control neurovascular interactions in the brain and retina.”*



Derek Jones, Cardiff University  
£1.8m over 7 years for *“the development and application of tractometry”*

Harry Gilbert, Newcastle University  
£1.4m over 5 years for *“Understanding the contribution of the human microbiota to human health”*.

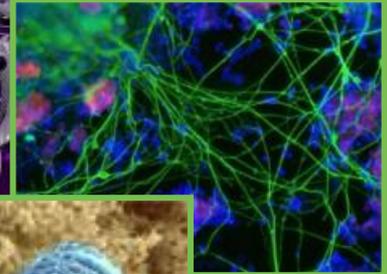


# Strategic Funding: A Catalytic Role

# Strategic funding

Large-scale collaborative projects, Centres, or themed initiatives

- Wellcome Trust Sanger Institute
- Major Overseas Programmes for global health: Kenya, Malawi, South Africa, Thailand, Vietnam, Laos
- 9 UK Wellcome Trust Centres
- International consortia:
  - Genome Wide Association Studies
  - 1000 Genome Project
  - International Cancer Genome Project
  - Structural Genomics Consortium
- 31 PhD Programmes

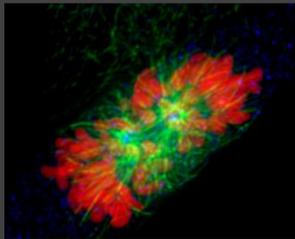


# Strategic Awards



**The London Pain Consortium** (£5M, Imperial, King's, UCL)  
To increase the understanding of pain processes and find new targets for the development of analgesics

**Centre for Mitochondrial Research**  
(£4.4m, Newcastle University) Research into mitochondrial biology and how mutations cause disease



**The Open Microscopy Environment**  
(£4.4m, Dundee University)  
Image informatics for biological sciences

**Medicines for Malaria Venture** (£8.6M, Novartis Institute for Tropical Diseases)  
Drug discovery and clinical development of a new malaria treatment

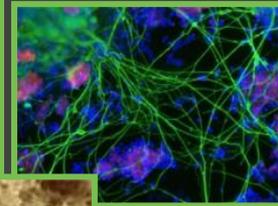


**Makers of Modern Biomedicine** (£2m, Queen Mary, London)  
Recording oral testimonies from those who have made major contributions to the legacy of modern biomedicine



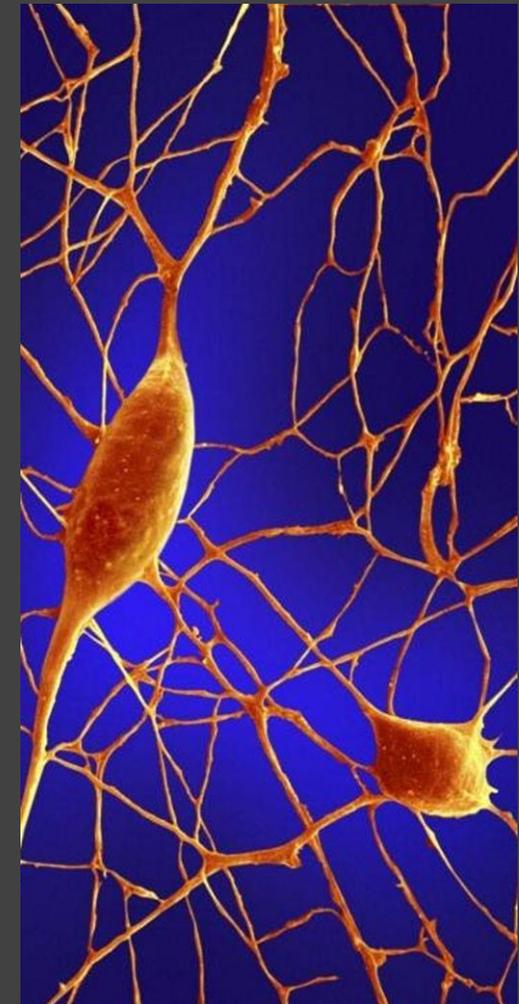
# Wellcome Trust Centres

- UCL Neuroimaging Centre
- Oxford Centre for Human Genetics.
- Edinburgh Cell Biology Centre.
- Newcastle Centre for Mitochondrial Research.
- Cambridge Centre for Stem Cell Research.
- Dundee Centre for Gene Regulation and Expression.
- Manchester Centre for Cell-Matrix Research.
- Glasgow Centre for Molecular Parasitology.
- Cambridge WT/CRUK Gurdon Institute.



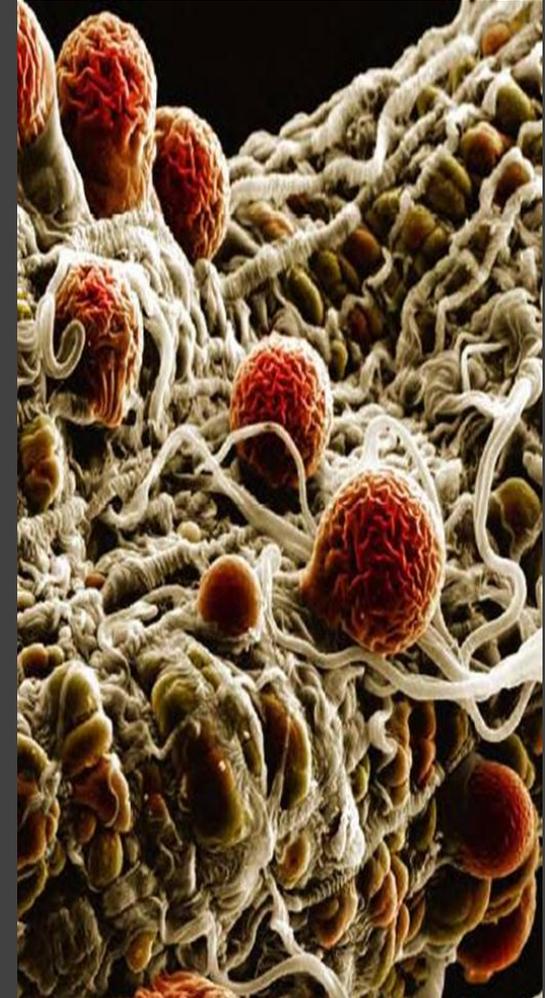
# Decision making

- international experts
  - 2500-4000 applications pa
  - 3-6 peer review reports
  - 15,000-17,000 requests pa
  - 45% response (65% UK, 35% USA)
- peer review college
  - trained & paid
  - up to 9 reviews pa
  - performance monitored
- triage & interviews
  - outline applications
  - use of Expert Review Groups
  - shortlisted - interview



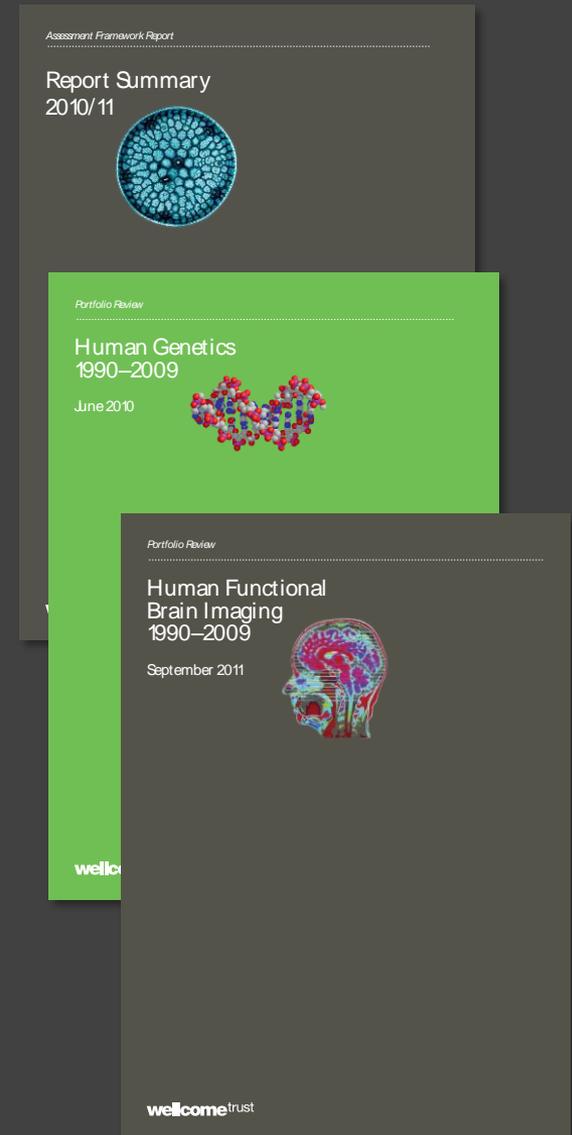
# Research Environment

- national research funding
- research integrity
- research leadership
- open access publishing
  - deposited in PubMed Central & UKPMC within 6 months of publication



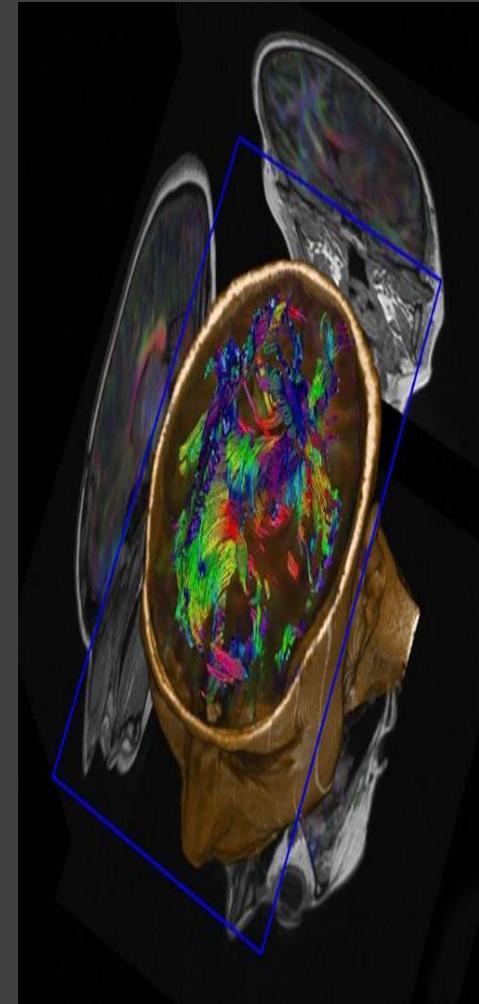
# Evaluation & assessment

- informs strategy & builds the evidence base to demonstrate the importance of biomedical research to the economy & society
- both quantitative & narrative approaches:
  - annual Assessment Framework
  - portfolio reviews
  - research profiles
  - end of grant reports



# Institutional Strategic Support Fund

- support to enhance universities' strategy for biomedical sciences
- incentives to accelerate scientific progress, advance translation & promote interdisciplinary collaboration
- matched-funded from university
- £20 million awarded to 23 universities
- awards: £0.5 - £1.5 million



# Embracing excellence

- funders play an essential role
- independent research foundations can be bold & innovative

**BUT**, funders & their researchers must also ensure that our legislators work to provide Europe with regulations that allow research to flourish



# Future Directions

Making the whole greater than the sum of parts...

- Focus on best people
- Increased clinical science
- Increased translation
- Focused global activities
- Increased partnership & leverage
- Develop strategic relationships with key UK academic institutions
- Increased stewardship of our funds



# Thank-you

