

Foundation Meeting on the New MRC Strategy

The Foundation for Science and
Technology

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Leading science for better health

MRC Strategic Plan 2009-2014

- Reputation as one the world's most successful biomedical research funders
- 28 Nobel Prizes
- Discoveries across all of biomedicine from monoclonal antibodies to link between smoking and cancer

Other Participants in Medical Research environment

- Many other funders (Wellcome Trust, CRUK, BHF, other Charities)
- Commercial Research (Pharma, Biotech, drugs, dx and devices)
- NIHR and the NHS
- MRC accounts for 20% of research spend from public sector

OSCHR

- Coordination of the 2 major health research budgets (MRC and NIHR). Cross dept working
- Eliminate redundancy and ensure support for the translational pipeline (lead organisation model)
- UK Wide working
- Strengthen Translational Medicine, e-Health and Public Health
- Increase the research budget to accommodate new activities and protect basic science
- 'Ring fence' around health research budget
- Monitor success

OSCHR : Unfinished business

- Communication
- Engagement with Industry
- Capacity Building
- Public Health
- E-health
- NHS



Leading science for better health

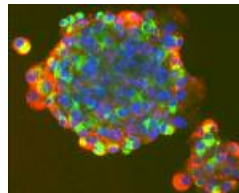
MRC – Strategic Plan 2009-2014

Issues

- Working with other funders
- Maintaining excellence in basic science
- Improving translational capacity
- Global reach

Picking research that delivers

- Resilience, repair and replacement
 - Natural protection
 - Tissue disease and degeneration
 - Mental health
 - Repair and replacement
- Living a long and health life
 - Genetics and disease
 - Lifecourse
 - Lifestyles affecting health
 - Environment and health

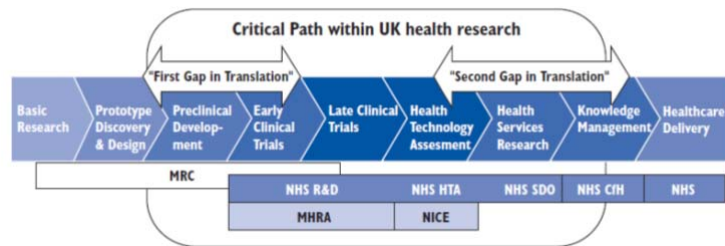


Lessons from the Ageing Agenda

- Lead Cross– council priority for 5 years
- Little impact on basic biomedical science
- Priorities
 - dietary restriction
 - IGF1
 - Sirtuins
 - oxidation
 - stem cell senescence
 - Glucocorticoids
 - DNA repair
- Interdisciplinary work should not constrain within discipline science

Research to People

- Translation
- Regulation, Ethics, Governance
- Communication



The Economy

- 'Improving economic competitiveness' in the Charter



- Developing new programmes for translation
 - DPFS scheme
 - Centre for Drug Discovery
 - TSB programme in stratified medicine
- Communication
- What else ??

Working with Industry

- Communication much improved
- Alignment in programs with large and small companies
- Established success of MRCT
- Limited by academic capabilities and lack of a single industry view of priorities
- Stratified medicine is an important challenge

Going Global

- Partnership and shaping the agenda
- Global health
- Infections
- Chronic Disease
- Europe?
- ROW?

nature

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FEATURE

Grand challenges in chronic non-communicable diseases

The top 20 policy and research priorities for conditions such as diabetes, stroke and heart disease.

Abdallah S. Daar¹, Peter A. Singer², Deepa Leah Persad³, Stig K. Præmming⁴, David R. Matthews⁵, Robert Gaugleheide⁶, Alan Bernstein⁷, Leszek K. Borysiewicz⁸, Stephen Colagiuri⁹, Nirmal Ganguly¹⁰, Roger I. Glass¹¹, Diane T. Fingleton¹², Jeffrey Koplan¹³, Elizabeth G. Nabel¹⁴, George Sarna¹⁵, Nizal Sarrafzadegan¹⁶, Richard Smith¹⁷, Dinesh Veck¹⁸ and John Bull¹⁹

Chronic non-communicable diseases (CNCDs) are reaching epidemic proportions worldwide¹. These diseases — which include cardiovascular conditions (mainly heart disease and stroke), some cancers, chronic respiratory conditions and type 2 diabetes — affect people of all ages, nationalities and classes. The conditions cause the greatest global share of death and disability, accounting for around 60% of all deaths worldwide. Some 80% of chronic disease deaths occur in low- and middle-income countries. They account for 44% of premature deaths world-



Poor diet and smoking are two factors that contribute to the millions of preventable deaths that occur each year.



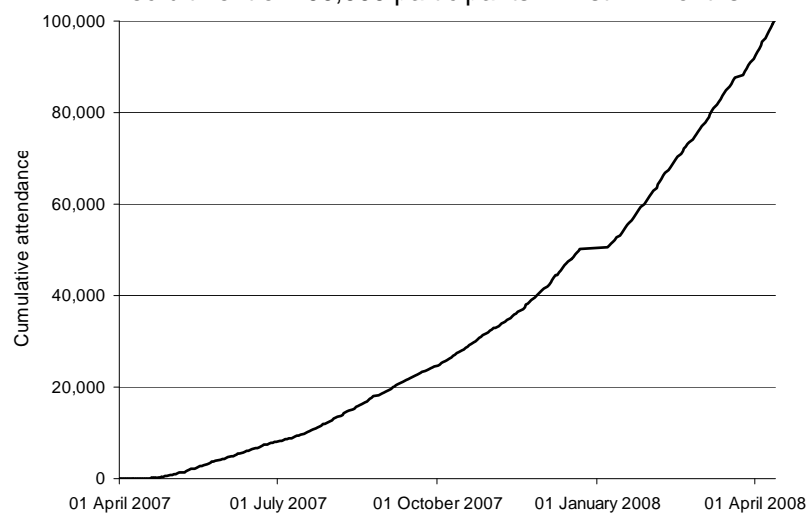
Supporting scientists

- Capacity
- Use of population based data
- Research environment



UK Biobank:

Recruitment of 100,000 participants in first 12 months



Challenges in Public Health

- Budget constrained
- Multisectoral input from Government departments (Health, Education, Transport, etc.)
- Diverse participants and programs (infectious disease, chronic disease, mental health)
- MRC experience in observational epidemiology

General Issues

- Large *versus* small
- How much should the MRC focus
- Is the ring fence secure?
- Top-down *versus* bottom-up
- Should the MRC make choices?
 - Effectiveness of total Health Research spend
 - Health Care need
 - Capacity and skill base
 - Scientific tractability and opportunity
 - Need to balance interdisciplinary and single discipline activity
 - Critical mass required in centres of excellence