

The History of Modern Biomedicine Research Group: *who we are, what we do, and how and why we do it...*



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Funding from the Wellcome Trust

- 2010-2015: £709,000 Fellowship
“Witnesses to twentieth century medicine”
- 2012-2017: £ 1,410,000 Strategic Award “Makers of modern biomedicine: testimonies and legacy”

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Strategic Award

Some past Witness Seminars

- Haemophilia
- MRSA
- Peptic ulcer
- Maternal care
- Cervical screening
- Clinical pharmacology
- Cystic fibrosis
- TB chemotherapy
- Common Cold Unit
- NMR & MRI
- Heart transplant in UK
- Obstetric ultrasound
- Psychiatric drugs
- Pain management
- Cholesterol
- Prenatal corticosteroids

Themes of strategic award

clinical genetics

neurosciences

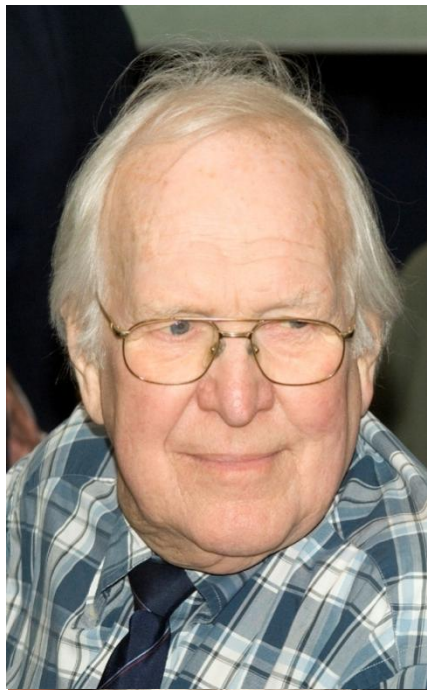
global health & infectious diseases

biomedical engineering

research ethics & practice



Our advisory board contains experts in all these areas, and representatives of several historical and scientific organisations



Some witness seminar participants
http://www.history.qmul.ac.uk/research/modbiomed/wellcome_witnesses/index.html



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[Wellcome Witnesses](#)

[Today's Neuroscience](#)

[Tomorrow's History](#)

What is a Witness Seminar

Advances in medical science and medical practice throughout the twentieth century, and especially after the Second World War, have proceeded at such a pace, and with such an intensity, that they provide new and genuine challenges to historians. Scientists and clinicians themselves frequently bemoan the rate at which published material proliferates in their disciplines, and the near impossibility of 'keeping up with the literature'. Pity, then, the poor historian, trying to make sense of this mass of published data, scouring archives for unpublished accounts and illuminating details, and attempting throughout to comprehend, contextualize, reconstruct and convey to others the stories of the recent past and their significance. The extensive published record of modern medicine and medical science raises



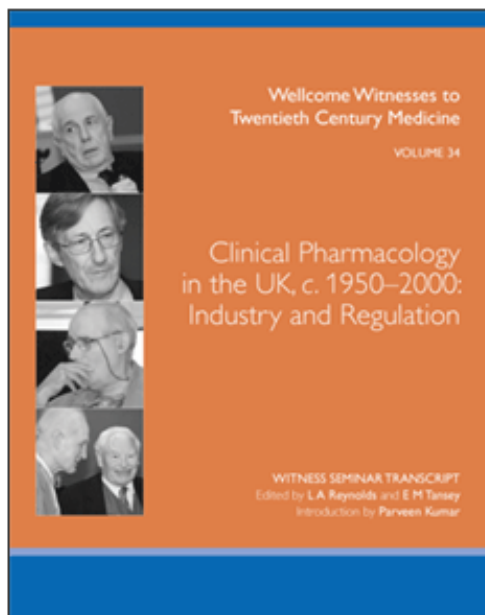
Clinical Pharmacology in the UK, c. 1950–2000: Industry and regulation

Clinical pharmacology in the UK in the 1950s and 1960s was an exciting profession. Many important new drugs were developed and brought to market and a more systematic knowledge of drug effects in humans was needed, as well as ensuring the safety and efficacy of new and existing drugs, especially following the unexpected problems arising from the use of thalidomide. This Witness Seminar followed an earlier meeting on the history of the general development of clinical pharmacology and focuses on the development of clinical pharmacology in pharmaceutical companies and drug regulation. Professor Rod Flower chaired the meeting of clinical pharmacologists and others who shaped the discipline, which discussed the main centres of influence; the attraction to clinical pharmacologists of working in industry; whether the decline in the number of academic clinical pharmacologists was paralleled in drug companies; what drove drug regulation; and the relationships between companies and regulatory authorities.

Participants included Dr Jeffrey Aronson, Professor Nigel Baber, Sir Alasdair Breckenridge, Sir Iain Chalmers, Professor Joe Collier, Professor Donald Davies, Dr Peter Fletcher, Dr Arthur Fowle, Professor Sir Charles George, Professor David Grahame-Smith, Professor John Griffin, Dr Andrew Herxheimer, Professor Ray Hill, Dr Peter Lewis, Dr Tim Mant, Professor Denis McDevitt, Professor Michael Orme, Dr Anthony Peck, Professor Brian Prichard, Professor Sir Michael Rawlins, Professor John Reid, Professor Philip Routledge, Dr Julian Shelley, Dr Robert Smith, Professor Cameron Swift, Professor Tilli Tansey, Dr Duncan Vere, and the late Professor Owen Wade.

[Clinical Pharmacology in the UK, c. 1950–2000: Industry and regulation](#)

[PDF 906 KB]



Ethel Bidwell from 'Haemophilia'



http://www.history.qmul.ac.uk/research/modbiomed/wellcome_witnesses/volume04/index.html

Tom Brown from 'Obstetric Ultrasound'



http://www.history.qmul.ac.uk/research/modbiomed/wellcome_witnesses/volume05/index.html

Recording laboratory technicians



<http://rsnr.royalsocietypublishing.org/content/62/1/77.full.pdf+html>

Recording neuroscientists

Today's Neuroscience – Tomorrow's History

Neuroscience has been one of the key areas of biomedical science that the Wellcome Trust has fostered and sponsored for nearly 60 years – in fact the very first 'fellowship' grant awarded by the Wellcome Trust in 1937 was to Otto Loewi, who shared the 1936 Nobel Prize in Physiology or Medicine with Sir Henry Dale for their work on the elucidation of chemical neurotransmission.

The Wellcome Trust has recently funded a research project directed by Professor Tilly Tansey (UCL) and Professor Les Iversen (Oxford) to record interviews with prominent neuroscientists, with the aim of providing resources about contemporary neuroscience for the use of present and future historians, as well as journalists, policy makers etc. Simultaneously the potential to engage young neuroscientists with their own history is offered, and some of the material generated by this work will be used for more general educational outreach activities.

Three major themes in modern neuroscience have been selected for study:

Neuropharmacology
British scientists have played major roles in the development of understanding of how drugs work on the peripheral and central nervous system.
Geoffrey Burnstock has provided new insights about chemical neurotransmission in the autonomic nervous system.
Sakuma Morisada is best known for his 1980s research which helped identify what was then described as 'endothelium derived relaxing factor' as nitric oxide.
Agneta Silver is internationally known for her pioneering work on acetylcholine in both the peripheral and central nervous system.
Alan North was among the first to study enkephalins at a cellular level using microelectrode recording and other pharmacological techniques.

Neuroimaging
The development of non-invasive methods that allow the visualization of the structure and the function of the living intact brain is one of the major achievements of the latter part of the twentieth century.
Peter Mansfield, Nobel Laureate 2003, was responsible for some of the key advances leading to the development of magnetic resonance imaging (MRI).
Roger Oatridge obtained the first reasonable images of human limbs and the first MRI movie images of a beating rabbit heart.
Terry Jones is a pioneer of positron emission tomography (PET) and his emphasis on non-invasiveness and the biological relevance of imaging signals led to many methodological advances.
Richard Frackowiak investigated the physiology of normal and diseased human brain with PET and subsequently MRI, establishing the quantitative steady-state method for measuring human cerebral blood flow and oxygen extraction.

Psychiatry/Neuropsychology
British scientists have had a major impact in the application of rigorous scientific methods to the complex fields of psychiatry and neuropsychology.
Michael Rutter's research includes childhood psychiatric illnesses, longitudinal studies of school effectiveness, depression and attention deficit hyperactivity disorder.
Uta Frith is a world expert in autism spectrum disorders. She was one of the first in the 1960s to assess the alterations in brain function that underlie autism, at a time when the general view was that autism was an emotional disorder with a psychological basis.
Elizabeth Warrington is a neuropsychologist whose work centres on how neural networks enable us to see, perceive, remember and discuss things.
Richard Gregory is internationally recognized for his new insights into the mechanisms underlying visual perception, those that underlie our consciousness of the external world.

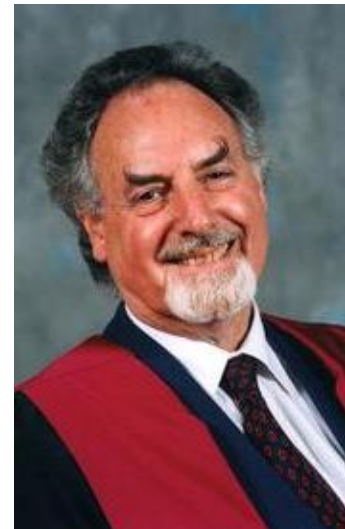
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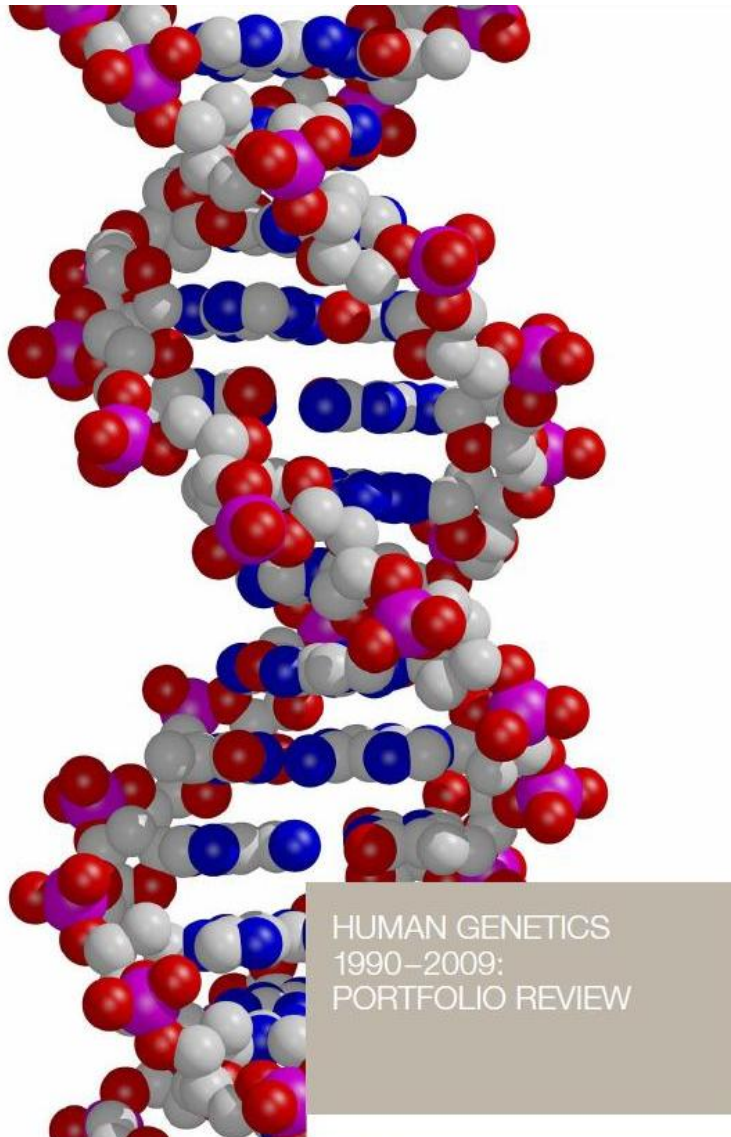
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<http://www.history.qmul.ac.uk/research/modbiomed/neuroscience-history/index.html>

Other Projects

<http://www.wellcome.ac.uk/About-us/Publications/Reports/Biomedical-science/>



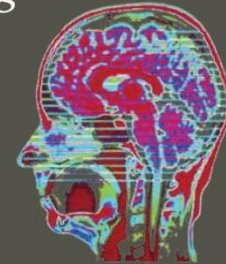
HUMAN GENETICS
1990–2009:
PORTFOLIO REVIEW

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Portfolio Review

Human Functional Brain Imaging 1990–2009

September 2011



Portfolio Review

Malaria 1990–2009

April 2012

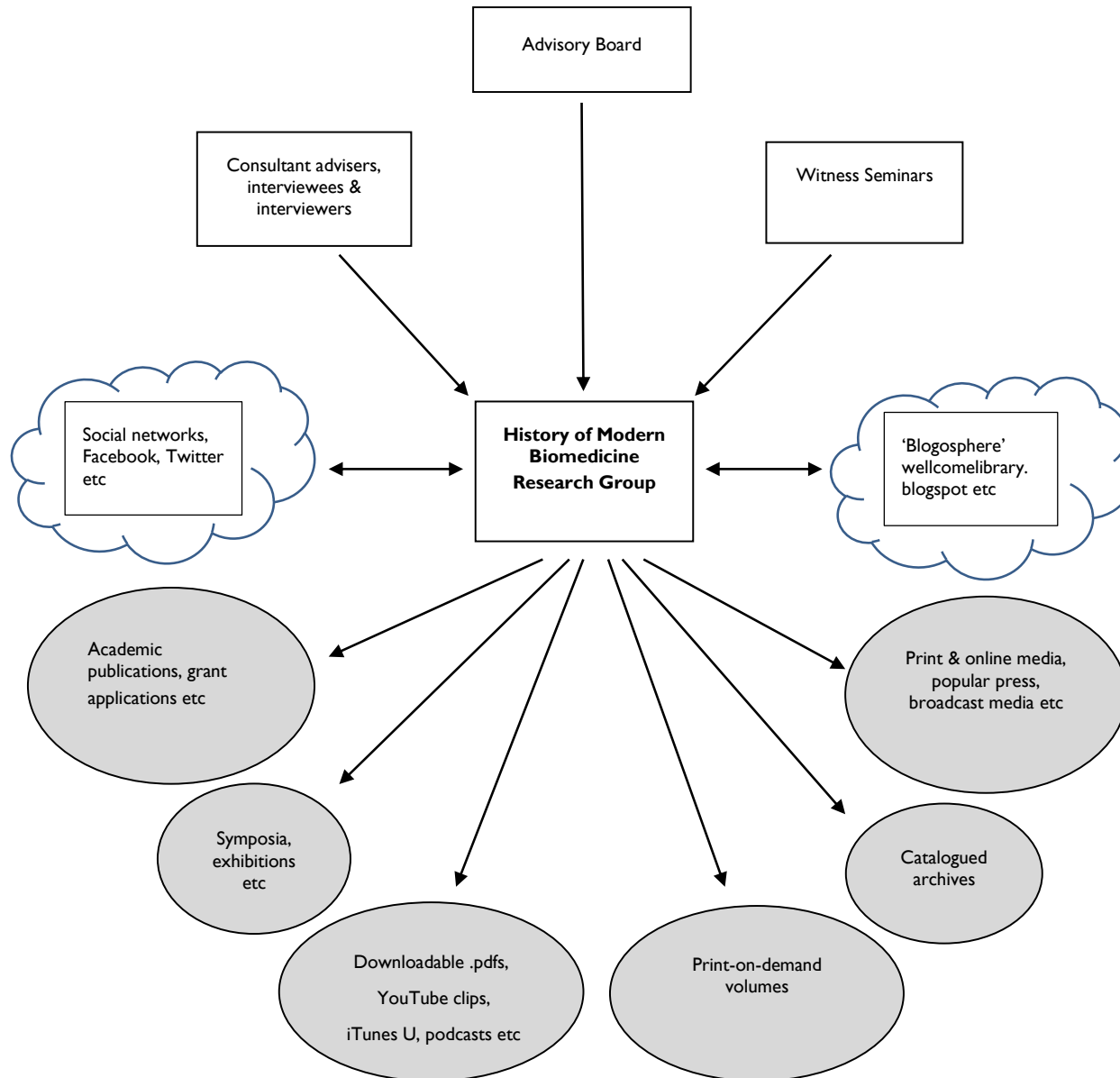


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Outputs



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