

06/07

Annual Report
and Accounts



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Medical Research Council

Annual Report and Accounts 2006/07

Presented to Parliament by the Secretary of State, and by the Comptroller and Auditor General in pursuance of Schedule I, Sections 2(2) and 3(3) of the Science and Technology Act 1965.

Sir John Chisholm
Chairman

Professor Sir Leszek Borysiewicz
Deputy Chairman and Chief Executive

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The Medical Research Council

The MRC

The Medical Research Council (MRC) was set up in 1913 to administer public funds for medical research. It was incorporated under its present title by Royal Charter in 1920. A supplemental charter was granted in 1993 describing the MRC's new mission following the 1993 government white paper on science and technology. The MRC's Royal Charter and Mission were amended in July 2003. The MRC receives an annual grant-in-aid from Parliament through the Office of Science and Innovation (OSI), part of the Department of Trade and Industry (DTI)¹. The MRC also receives funds from other sources including government departments, international agencies, industry and medical research charities.

The MRC's strategic aims are developed in consultation with stakeholders and with reference to the mission enshrined in the MRC Charter and to the objectives set out in the 2004 Government Spending Review, which agreed allocations for 2006/07 and 2007/08. Its aims also contribute to the OSI Public Service Agreement target of improving the international performance of the UK's science and engineering base, exploitation of the UK science base, and the innovation performance of the UK economy.

The MRC's mission is to:

- Encourage and support high-quality research with the aim of improving human health.
- Produce skilled researchers and to advance and disseminate knowledge and technology to improve the quality of life and economic competitiveness in the UK.
- Promote dialogue with the public about medical research.

The Annual Report describes the MRC's progress between 1 April 2006 and 31 March 2007 in meeting our strategic aims set out in the MRC Strategic Plan 2004-2007 and the objectives set out in the Government Science Budget allocations for the period. A selection of outstanding achievements by MRC scientists during the period highlighted in the MRC Annual Review 2006/07.

For more information about MRC activities and to view MRC publications visit www.mrc.ac.uk.

RCUK

Research Councils UK (RCUK) is a partnership of the seven (formerly eight) UK Research Councils – public bodies funded mainly by the UK Government via OSI.

Led by the research council chief executives, RCUK has an overall aim for the UK research councils to be recognised as the benchmark around the world in terms of the impact they have and the ways they work. Its mission is to optimise the ways that research councils work together to deliver their goals, to enhance the overall performance and impact of UK research, training and knowledge transfer and to be recognised by academia, business and Government for excellence in research sponsorship.

¹ The Department for Innovation Universities and Skills (DIUS) was established in June 2007 following the dissolution of the Department of Trade and Industry. The new Department brings together the science and innovation responsibilities from the DTI, and skills, further and higher education from the Department for Education and Skills.

MRC Council Members 2006/07

The MRC is governed by its Council, which directs and oversees corporate policy and scientific strategy, ensures that the MRC is effectively managed, and makes major policy and spending decisions.

Council members share collective responsibility for the MRC's actions and performance. Responsibility for implementing the Council's strategy and decisions is delegated to the Chief Executive, Professor Colin Blakemore.

Sir John Chisholm

Chairman

(appointed 1 October 2006)

Professor Colin Blakemore

Deputy Chairman and Chief Executive

Professor David Armstrong

King's College London

Mr Michael Brooks

Financial Management Consultant

Dr Harry Burns

Scottish Executive Health Department

Professor Kay Davies

University of Oxford

Professor Sally Davies

Department of Health

Professor Carol Dezateux

University College London

Dr Peter Fellner

Vernalis, Plc

Professor Christopher Kennard

Imperial College London

(appointed 1 August 2006)

Dr Michael McBride

Northern Ireland Department of Health,
Social Services and Public Safety

(appointed 1 November 2006)

Professor Andrew McMichael

University of Oxford

Dr Lefkos Middleton

Independent consultant

(formerly GlaxoSmithKline to December 2006)

Mr John Neilson

OSI observer

Professor Geneva Richardson

King's College London

Professor John Savill

University of Edinburgh

Professor Herb Sewell

University of Nottingham

Professor Michael Wakelam

The Babraham Institute

(formerly University of Birmingham to 31 Jan 2007)

(appointment ended 31 March 2007)

Outgoing members

Sir Anthony Cleaver

Chairman

(appointment ended 30 September 2006)

Mr Derek Flint

Non-Executive Director of Alliance and Leicester Insurance plc

(appointment ended 31 July 2006)

Professor Alan North

University of Manchester

(appointment ended 31 July 2006)

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Foreword

from the Chairman and Chief Executive



It is with great pleasure that I have taken on the role of Chairman of the MRC, during this interesting transition. I arrived just as the Cooksey review was coming to a close and the MRC was beginning to plan its future in a world where nations are competing on a basis of how quickly they can innovate. There is no area of scientific endeavour more likely to change the course of human civilisation for the better over the next 20 years than medical research. Through the new structures, including partnership with the Office for Strategic Coordination of Health Research (OSCHR) and the overarching strategy boards, the MRC will strive, as it always has done, to fund excellent discovery science to deliver optimal improvements to human health.

As Chief Executive, Colin has been a determined advocate for the MRC, and for the strength of UK science. He has raised the public and professional profile of the MRC nationally and internationally, and has effectively engaged the community in responding to changing research and financial environments. On behalf of the MRC's Council, I would like to thank him for his contribution to the success of the MRC and wish him well for the future.

Sir Leszek Borysiewicz, who replaces Colin as Chief Executive¹, will now lead the MRC in the new environment of coordinated health research in the UK. His stature as a scientist and clinician reflects the importance of the role the MRC will play in a coordinated strategy for turning research findings into healthcare.

Sir John Chisholm
Chairman



As I approach the end of my term as Chief Executive, I reflect on the MRC's achievements with pride. Over our long history, we have funded outstanding science. Many of the discoveries funded by the MRC have been translated – by us, the NHS, industry or other funders – into outcomes to improve healthcare, public policies and the economy.

The UK medical research system is today facing one of the biggest transformations since the foundation of the MRC 94 years ago. As the MRC moves on to play a key role in the new integrated health strategy and to capitalise on the opportunities such change offers, I wish my successor, the MRC and all our scientists the very best for a productive and prosperous future.

Professor Colin Blakemore
Deputy Chairman and Chief Executive

¹ Sir Leszek Borysiewicz was appointed 1 October 2007.

Foreword continued...

The Medical Research Council (MRC) has a proven track record for funding excellent discovery research in basic, clinical and population science, and outstanding clinical trials. MRC-funded work has led to some of the most important advances in medical knowledge, research methods and healthcare delivery since it was established in 1913. In the past year, the MRC has continued to deliver discovery science for health, supporting excellent and innovative science, and has made significant steps in moving forward with the translational research agenda to develop and apply research findings for public and patient benefit.

Sir David Cooksey's report, published in November 2006, put the translation of research into healthcare benefit at the very centre of public sector health research strategy. The review has led to the creation of the new Office for Strategic Coordination of Health Research (OSCHR) which will support the MRC, the National Institute for Health Research (NIHR) in England, and the Health Departments in Northern Ireland, Scotland and Wales in working together to deliver a single strategy for health research. The creation of OSCHR represents a major change in the way we will develop and implement strategy. However basic research will remain the driver of future health improvements; continued sustained investment in basic biomedical research is essential. Discovery science for health is the fundamental basis of what we do.

Early in 2007, we initiated a joint review, with Ernst & Young, of the MRC's structures and operations. The MRC's Council considered the report from the joint team at its meeting in March 2007 and, during 2007/08, will take forward a number of measures in response to the key review findings. We believe these changes will enable the MRC to maintain its international reputation for high-quality research, ensure that we will be effective and adaptable in the new environment, and strengthen our capacity to deliver the translational agenda. Some of these measures will involve active engagement and discussion with the research community and other key stakeholders. As the relationship with NIHR and OSCHR develops further, we may well make some changes in funding and operations. There may also be

decisions taken on issues of structure and function later in the year, following the appointment of the MRC's new Chief Executive, who will succeed Colin Blakemore in the autumn.

Building on work in previous years, which aimed to simplify grant schemes and to embed devolved research board budgets, the MRC has continued to increase spending in key areas, such as experimental medicine and biomarkers, training, and targeted forms of funding such as centre grants. In 2006/07, we awarded £15 million to six new centres in translational medicine – to enable scientific research to improve human health more quickly and efficiently, by developing new drugs, therapies, diagnostic tools or methods of prevention, or using clinical knowledge to inform research priorities. The MRC's commercial arm, MRC Technology, continues to achieve results in the exploitation of our medical discoveries with a total income since 2003 of £245 million. The monoclonal antibody market worldwide, based on fundamental MRC research carried out in the 1970s and translational research in the 1980s and 1990s, has been rising by 20 to 30 per cent a year and reached £9 billion in 2006.

We are encouraged by the Government's promise, announced in the March 2007 budget, to raise the overall science budget by 2.5 per cent a year in real terms over the Comprehensive Spending Review 2007 (CSR2007) period. We will be working with other stakeholders, such as the Wellcome Trust, other charities, the Health Departments and industry, to maximise the value of this investment and the outputs of research.

In the coming year, we will pursue a programme of change to enable to MRC to maintain its international reputation for high-quality research, to ensure that we are effective and adaptable in the new UK health research environment, and to strengthen our capacity to pursue the translation agenda. The alignment of the MRC, NIHR and other public sector funders of medical research within a single integrated strategy will contribute to the strength of UK medical research in years to come.

Executive summary

Delivering discovery science for health

In delivering our mission we:

- Provide funding for high-quality research proposals from scientists who have identified scientific problems or health needs.
- Invest in training, supporting scientists in universities and our own research centres.
- Support national medical research infrastructure over the long term by funding existing facilities and establishing new research centres in strategically important areas.

During 2006/07:

- We awarded 288 new grants to researchers in universities and medical schools at a value of £171.8 million, including important new awards for 'translation centres' and for research into methodology and implementation, biomarkers, mutagenesis, integrative physiology, autism, neurodegenerative disease and pandemic influenza.
- We spent £52.2m on training award spending for postgraduate students and fellows, including £6.6m on students and fellows in our units and institutes.
- We supported our research units and institutes with £304.8m (£253.6m on Resource, including training awards, and £51.2m on Capital). Scientists at our units and institutes produced almost 2,000 publications in peer-reviewed journals.
- Alongside core programmes, we issued new calls for proposals for centres relevant to lifelong health and wellbeing, translation, vaccine research and biomarkers, and issued highlight notices in musculoskeletal research and respiratory medicine. To inform future strategy we also held workshops on translation research, e-science and mental health in the workplace, conducted strategic reviews in toxicology and health services research, and initiated a strategic review of virology.

People

- We employ over 4,000 people in the UK and overseas and are working towards Investors in People accreditation for all units.
- We initiated our new strategy for human resources.
- We have made progress in reviewing intramural governance arrangements and operational effectiveness, such as the evolution of ideas of what regional administrations should deliver.
- We have consulted on and published schemes and action plans to support race and disability as part of our diversity programme.
- We conducted a review of the MRC's investment in training. The Council endorsed the primary recommendations for continued and increased investment and a greater emphasis on partnerships with industry, charities and professional bodies.
- We increased our commitment to clinical academic training, awarding 56 new clinical research training fellowships in 2006/07.

Bringing discoveries to the market

- Licensing income increased by £12.4m, from £34.2m in 2005/06 to £46.6m in 2006/07, and cash receipts reached £65m, bringing total cash generated since 1998 to £299m.

- MRC Technology's (MRCT) Development Gap Fund received 25 new submissions for pre-seed funding to MRC scientists, to help early-stage ideas and inventions progress towards commercialisation and patient benefit. Eleven projects were funded at a cost of £960k; the average size of investment was £87k with a project duration of between six and 24 months.
- In 2006/07, MRCT filed 25 patent applications and was granted 15 patents. The overall patent portfolio has 117 patent families and cost £1.1m to maintain in the financial year.

Engaging with people

- We commissioned a public survey of attitudes and awareness relating to the use of personal health information in medical research and are working with other stakeholders who have an interest in this area to build awareness, take account of concerns and to communicate the importance of this type of research.
- We have published on our website 14 case studies, termed *Stories of discovery*, to communicate the wider benefits to society of our research outputs.
- In partnership with the Wellcome Trust, we held a conference with press officers from universities and funding bodies to explore sharing good practice, joint working on stories with multiple partners, and promoting the best stories and scientists in the media.

Good research practice and efficiency

- We renewed funding for the Nuffield Council on Bioethics at a level of £1.15m a year for five years, starting on 1 January 2007.
- We have enhanced our ability to handle risk and have improved risk management processes, including the revision of the risk management policy.
- The MRC Shared Service Centre is now fully operational and provides procurement, and transactional finance and HR services to all MRC establishments. The new centre has led both to savings in posts, and to the transfer of posts out of the South East, and has contributed to achieving efficiency savings targets set by the Government, which the MRC exceeded in 2006/07.

Finance

- The MRC's Departmental Expenditure Limit (DEL) allocation for 2006/07 was £418.7m for Resource expenditure (£444.2m in 2005/06) and £85.1m for Capital expenditure (£36.6m in 2005/06).
- Actual DEL Resource expenditure exceeded the annual allocation by £58.2m. This was funded from brought forward surpluses.
- Actual DEL Capital expenditure was less than the annual allocation. This underspend is earmarked for a major capital project in 2007/08.
- The total Resource expenditure, net of external income, was £477m (£458.6m in 2005/06).

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Delivering discovery science for health

Supporting high-quality research with the aim of improving human health

A healthy medical research base is essential for generating new ways to prevent disease and improve healthcare. The MRC supports research and training across the full spectrum of biomedical research. It promotes partnerships across different disciplines and targets its spending to maximise the exploitation of its discoveries to benefit the health and wealth of society.

Research priorities, strategy and partnerships

The MRC's strategic aims and research priorities are developed in response to health need in consultation with the Health Departments, the other UK research councils, industry and other stakeholders. Priorities reflect the objectives set out in Government Spending Reviews, the most recent of which (SR2004) agreed funding allocations for 2006/07 and 2007/08. Priorities are also consistent with the objectives of the Office of Science and Innovation (OSI) which are to improve the international performance of the UK's science and engineering base, and its exploitation.

Health is determined by many factors: genetic inheritance, development, infection, diet, lifestyle and physical and chemical hazards; the cultural and socioeconomic environment; and the public health and healthcare systems available. There are currently two major priorities for the MRC, i) supporting advances at the molecular level to increase and accelerate the understanding of cell, organ and organism function in health and disease, and ii) strengthening the translation of the results of such work into improved healthcare, products and services. For 2006/07, the MRC has continued to pursue the seven individual, but inter-related, priority programmes agreed under SR2004 – clinical and public health research, infections and vaccine research, sustaining capability in areas of strategic importance, global health, biomarkers and ageing; as well as developing further areas identified through the 2002 Spending Review, which included regenerative medicine, systems and integrative biology, and brain sciences.

Strong research and training programmes, access to the NHS's unique infrastructure, and effective partnerships underpin the MRC's approach to delivering discovery science for health. We also promote the link between basic and clinical research and boost efforts in experimental medicine and the population health sciences. Sir David Cooksey's report in November 2006 put the translation of research into healthcare benefit at the centre of public sector health research strategy and created the new Office for Strategic Coordination of Health Research (OSCHR) to support the MRC in working with the National Institute for Health Research (NIHR) in England, and the Health Departments in Northern Ireland, Scotland and Wales.

Alignment with OSCHR, NIHR and other key stakeholders such as the Health Departments, industry and research charities will play a major part in maintaining vital support for research and skills in the coming years.

At the beginning of 2007, we initiated a joint review, with Ernst & Young, to support us in defining our role in the new UK health research environment. The MRC's Council considered the report on the MRC's roles, structures and operations in March 2007 and, during 2007/08, will take forward a number of measures in response to the key findings of the review.

In developing future strategy and priorities, the MRC has been working, throughout 2006/07, with the other research councils, OSCHR, NIHR and the Health Departments to develop submissions to the 2007 Comprehensive Spending Review (CSR2007). The final CSR2007 settlement and the MRC's delivery plans for the period will be finalised in autumn 2007, funding priorities for 2007/08 have been broadly identified and published through the Delivery Plan for 2007/08; these are based on the 2006/07 Delivery Plan and subsequent developments.

The delivery plan and performance management system

This is the second year of operation of the research councils' performance management system, which enables the OSI to determine the contribution that each research council is making towards achieving government targets.

There are three key ways in which the research councils account to OSI. The annual Delivery Plan – the current version of which is published on the MRC website – sets out how the MRC will contribute towards meeting government targets for the science base, and how it will fulfil its own strategic objectives. The Scorecard enables OSI to track the MRC's progress against its organisational milestones on a quarterly basis. The Outputs Framework is a set of metrics, for which data were published for the first time in June 2006, on achievements in 2005/06.

Evaluation

The Subcommittee on Evaluation, a sub-committee of the MRC's Council, is overseeing the establishment of a programme of evaluation activities which will enable the Council and other stakeholders to judge the MRC's performance against its strategic objectives. Following the recommendations of the joint MRC and Ernst & Young review, we will be increasing our evaluation and exploring opportunities to work more closely with the Health Departments and other stakeholders.

The MRC launched a number of projects during the year, the most notable of which is a joint initiative with the Wellcome Trust and the Academy of Medical Sciences to quantify the economic return to the UK of investment in UK medical research. The MRC is also cooperating in a cross-research council study of the economic impacts of research council-funded science. The MRC is developing metrics which enable it to monitor its achievements, initially in its own units and institutes, quantitatively against performance objectives for the organisation. A number of factors are being considered as 'indicators', such as collaborations, outputs and citations for each lead scientist.

We are also evaluating our research outputs qualitatively, by producing a series of 'case studies' – written accounts of how medical research in specific areas has benefited the health and wealth of society. OSI requires these periodically for use in Department of Trade and Industry (DTI) publications and as scientific briefings. In 2006/07, we submitted to OSI case studies on malaria mosquito nets, antithrombotics, leukaemia, smoking, statins, folic acid and cystic fibrosis. The malaria mosquito nets case study was published in December 2006 in a DTI publication called *Science and Innovation: making the most of UK research*.

Research

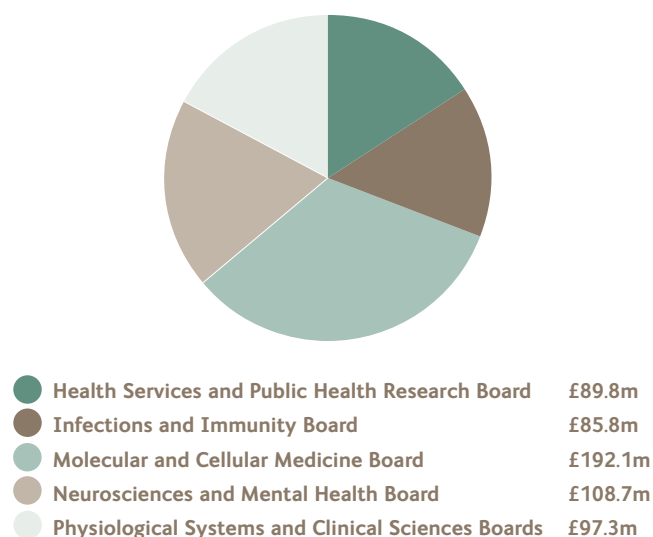
The MRC invests in high-quality research and training in response to research proposals from clinical and non-clinical scientists in UK universities and hospitals, through partnerships with universities in funding research centres, through our own research facilities, and in supporting access to national and international research facilities and infrastructure. The main factors in funding decisions are research excellence, scientific opportunity, the potential impact of the research on improving human health, how well the area can be managed, the potential for exploitation and the opportunities for research training. The MRC's Council is supported in delivering discovery science for health by five research boards, a dedicated board which advises on training and career development issues and a number of other advisory groups. The role of these bodies is to maintain a broadly balanced portfolio of research, and at the same time to shape our portfolio, in order to:

- Ensure research reflects changing health needs – such as the UK's ageing population, or the global challenge from new forms of influenza.
- Ensure cooperation or concentration of effort to maximise the national and international impact of research.
- Reflect the needs of others who use our research – in public services and in industry – and respond to international research trends.
- Accelerate the development of promising new research opportunities – for example, investing in the UK Biobank to provide better ways of exploring how genetics, environment and lifestyle interact.
- Improve the productivity of the medical research base by investing in infrastructure and training.

The MRC's portfolio can be broken down into five broad areas, which relate to the remits of the five research boards. The following section outlines some major activities and developments in these areas during 2006/07, including research and funding highlights and new and ongoing partnerships with other research councils, government departments and charities. Our work with industry is outlined in *Bringing discoveries to the market* (page 31), and communication activities and joint consultations in *Engaging with people* (page 35).

In 2006/07, the gross spend across the MRC's research portfolio was £573.7m. The estimated distribution across the five scientific areas is shown in Figure 1.

Figure 1: Estimated gross spend across the MRC portfolio



Health services and public health research

In 2006/07, the MRC's estimated gross spend on the portfolio of health services and public health research was £89.8m. The remit of the Health Services and Public Health Research Board (HSPHRB) comprised four main areas: the development and evaluation of healthcare interventions; population-based aetiological studies (which concern the factors involved in disease progression with particular emphasis on environmental and psychosocial factors); implementation studies (how to put research findings into practice); and methodological developments (the study of methods that underpin health research).

During the year, the board's priorities were methodology and implementation, e-science and population health research, continuing and developing key partnerships in sexual health, general practice research, ageing and the UK Biobank. Two of six translation centres funded during 2006/07 were within the HSPHRB's remit. The board also conducted a strategic review in health services research.

Methodology and implementation

The HSPHRB issued a call for proposals in methodology and implementation in January 2006, with the intention of strengthening this area and helping develop the evidence that underpins the best ways of putting research findings into practice. Thirteen awards (twelve on methodology and one on implementation) were made in July 2007 at a total value of £3.4m. The successful applications included methodological research in population health science (interventions, trials and observational studies), improving recruitment and retention, development of methods at the interface of epidemiology, social science and bioscience, health economics and decision science and implementation research.

E-science

During the year the board worked with current MRC-funded e-science award holders to explore the requirements and technical challenges of e-science in clinical trial management. Delegates at a workshop in September 2006 reviewed ideas and discussed how these can be disseminated more widely. Similar issues were explored at the *E-science all hands* meeting in February 2007, which brought together the e-science community to share problems, solutions and best practice, and to discuss emerging issues and solutions.

Population Health Research Overview Group

The MRC Delivery Plan for 2005–2008 identified the population health research agenda, alongside clinical research, as a priority and the Population Health Research Overview Group (PHROG) – a cross-board group with representation from key stakeholders, including Health Departments and MRC units – was established. The remit of PHROG was to maintain an overview of the MRC's activities in this area and to develop a strategy for future investments in the field. During the year, PHROG developed a vision for population health research and produced a number of recommendations to help achieve this.

The vision described the multidisciplinary and translational nature of population health research required to address complex public health questions, and highlighted the need for a link between population health research and basic biomedical, physical and social sciences. PHROG emphasised that research must be informed by policy and practice needs, and that the evidence provided should be implemented in future initiatives. In developing this vision and these principles, PHROG recognised the need to identify areas in which the MRC adds most value to the activities of others in research, policy and practice. The Cooksey Review, published after PHROG's discussions, endorsed the overall vision, recognising the enormous potential within the field to contribute to public health. It also identified activities across a number of government departments and priority areas.

The PHROG report was welcomed by the MRC's Council in December 2006 as an opportunity to stimulate necessary dialogue. However, the Council noted that the role of the MRC in taking forward actions in these areas would need to be revisited in the context of the implementation of the Cooksey Review recommendations, and in discussion with the Health Departments and OSCHR. As OSCHR's proposals develop, the Council anticipates that the MRC will continue to have a role in leading aspects of the public health research agenda, including working with the other UK research councils.

Sexual Health and HIV Research Strategy Committee (SHHRSC)

The SHHRSC is funded by the Department of Health, England (DH) and the MRC. At the end of 2005, the committee commissioned Professor Helen Roberts and her team at City University, London, to carry out a review of UK-supported sexual health research since 2000 (UK-based sexual health and HIV research scoping and mapping project: <http://eppi.ioe.ac.uk/webdatabases/SexualHealthResearch>). Following the publication of the report in the first half of 2006, the SHHRSC ran a call for proposals in five specific research areas, building on the programme of research supported by SHHRSC thus far. The call aims to contribute further evidence to enable shaping of *Choosing health* – the DH's White Paper that sets out the key principles for supporting the public to make healthier and more informed choices in regards to their health – and of sexual health strategies throughout the UK. The committee received 40 applications and made eight awards at a value of £1.8m.

General Practice Research Database (GPRD)

The GPRD is the world's largest database of anonymous long-term medical records from primary care. It contains comprehensive observational data from real-life UK clinical practice and can provide analytical insight for a wide range of applications in clinical trials, drug safety, outcomes research and clinical epidemiology. During 2006/07, the MRC secured an agreement with the GPRD which allows free access to GPRD data for the UK academic research community over the next five years. So far, over 40 research studies have benefited from this arrangement.

Ageing

The New Dynamics of Ageing initiative is an £18m cross-research council programme aimed at developing interdisciplinary research approaches to advance the understanding of the dynamics of ageing. It includes the health and wellbeing of older people.

The programme is led by the Economic and Social Research Council (ESRC), in partnership with the MRC, the Engineering and Physical Sciences Research Council (EPSRC), the Biotechnology and Biological Sciences Research Council (BBSRC) and the Arts and Humanities Research Council (AHRC). The first call for proposals was announced in spring 2005, and a cross-council panel considered full proposals in April 2006 and made awards soon afterwards. The programme was informed in part by a public survey, carried out by the research company Ipsos MORI and commissioned by the MRC and BBSRC, to assess attitudes to scientific research into ageing. The results, published in July 2006, showed that the issues that most concern the public are improving quality of life, preventing future problems and looking for cures. Many felt that quality of life is an important aim for research and is an important factor to be considered when making funding decisions.

The MRC agreed to support an £8m Lifelong Health and Wellbeing initiative in 2007/08. This call is a cross-research council initiative with the BBSRC, the EPSRC and the ESRC, which are all willing to commit funds if a proposal for a centre falls within their own remits. The call was formally launched at an applicants' workshop held in March 2007. Final funding decisions will be made in March 2008. The MRC is also taking the lead in developing cross-council plans for research into ageing in the context of CSR2007.

UK Biobank

The HSPHRB is the lead MRC research board overseeing UK Biobank, working in partnership with the Wellcome Trust, DH and the Scottish Executive. During 2006/07, UK Biobank undertook a large-scale integrated pilot study with over 3,000 participants, and the results informed the final protocol for the project. This underwent rigorous peer review and was assessed by an independent international review panel in July 2006. The review panel strongly supported the protocol and commended the design as a benchmark for large cohorts of this type. Consequently, the MRC and the Wellcome Trust gave approval for UK Biobank to move into its full recruitment stage. In March 2007, the first invitations for participation were sent out, with the aim of completing recruitment of all 500,000 people by 2010.

Strategic review of health services research

The MRC carried out a strategic review of health services research (HSR) in July 2006. This was prompted by Professor Paul Dieppe's intention to retire as Director of the MRC Health Services Research Collaboration (HSRC) in 2009. The strategic review group, comprising members of the HSPHRB and other national and international experts, identified the overarching strategic need in HSR to be an effective interface between basic, applied and methodological HSR, and healthcare systems. The group identified clinicians, managers and policy-makers as the three key audiences with whom to develop these interface partnerships.

The MRC's Council endorsed the recommendations of the review committee and agreed that, as currently constituted, the HSRC did not address these future strategic needs and agreed that the HSRC should not be continued beyond the current quinquennium (five-year) period (to March 2009). Discussions are ongoing with stakeholders on how best to support HSR in the longer term. Further information on the MRC's approach to strategic reviews is on page 22.

Infections and immunity

In 2006/07, the MRC's estimated gross spend on the portfolio of infections and immunity research, which includes research to understand the processes fundamental to infection, pathogenesis and inflammation, was £85.8m. This research is funded mainly through the Infections and Immunity Board (IIB). Clinical trials funded through the Health Services and Public Health Research Board translate that knowledge into better ways of prevention, diagnosis and treatment. During the year, the board's priorities were the acceleration of vaccine research, emerging infections – in particular, potentially pandemic influenza – healthcare-associated infections and antimicrobial resistance, genomic epidemiology and global infections research, with an aim to develop research capacity. Two of the six translation centres funded during 2006/07 were within the IIB's remit and the board also initiated a strategic review of virology research.

Vaccine research

The IIB has identified strengths in the MRC vaccines portfolio as basic immunology, pathogen biology and phase III trials. In January 2007, the board convened an expert group drawing on experience from industry, the World Health Organization (WHO) and academia internationally. This group identified a number of gaps in the translation of novel science to products and policies. In response, the MRC launched a call for proposals for translational vaccine research in March 2007. Closing in May 2007, the call focuses on the promotion of collaborations between academics, industry and governmental organisations to accelerate the translation of their novel research into scientific areas such as T-cell biology, adjuvants and mucosal vaccines. The board expects to decide on funding in July 2007 and will announce awards shortly afterwards.

Healthcare-associated infections and antimicrobial resistance

The MRC is working with the UK Clinical Research Collaboration (UKCRC) to find solutions to the problem of weak capacity in clinical infections research and fragmentation within the microbiology community. In May 2007, the MRC will host a workshop on healthcare-associated infections and antimicrobial resistance in partnership with DH, the UKCRC and the Infectious Disease Research Network – which was established in 2002 and is funded by the National Co-ordinating Centre for Research Capacity Development. Further work is in progress to develop an initiative in the area of translational infection research in partnership with other UK funders, under the auspices of the UKCRC.

Pandemic influenza

In 2006, the MRC made available, via the IIB, up to £15m of funds to support influenza research. From the 52 applications received to date, 18 awards have been made totalling £7.6m. This includes a contribution to Professor Neil Ferguson's translation centre, at Imperial College London, for infection outbreak analysis and modelling directly relevant to emerging infections and flu. These strategic funds have considerably strengthened the MRC's support for influenza research, raising the annual spend from about £1.6m to £4.3m. Research supported through the initiative ranges from basic molecular studies of viral replication and host response to diagnostics and vaccine/drug development and clinical and public health studies. Projects include those from the National Institute for Biological Standards and Control (NIBSC), the University of Leicester and the MRC Human Immunology Unit (HIU), Oxford, on better vaccines; and UCL/HIU/Health Protection Agency (HPA) on the behavioural and biological determinants of influenza transmission – *Flu Watch*. The initiative has further fostered collaborations between the board's intramural (National Institute for Medical Research in London and the HIU) and extramural programmes, with other key partners (NIBSC, HPA, Chiron Vaccines Ltd). It also supports the continuing development of our links with infections researchers in China.

The MRC Centre for Outbreak Analysis and Modelling, funded in response to the call for proposals for centres in translational medicine, will study how best to control epidemics using public health measures, travel restrictions, drugs and vaccines. Researchers at the centre, based at Imperial College London and involving staff at the HPA, will use mathematical modelling and statistical analysis, working closely with public health organisations around the world. The centre is one of six that the MRC launched in March 2006 under the translational centres call, at a total cost of £15.5m. Further information on the other centres funded through this call is on page 21.

Genomics and global health

The new MRC Centre for Genomics and Global Health, led by Professor Dominic Kwiatkowski, was funded under the translational centres call and is based at the University of Oxford and the Wellcome Trust Sanger Institute. It will link clinical data with advanced genomics of populations to reveal why some individuals are relatively resistant to infection or severe illness. Researchers will work with populations across the world to understand natural mechanisms of protective immunity and how parasites and microbes can evade the human immune system and resist drugs. The discoveries should help reduce the burden of disease in the developing world due to malaria, HIV/AIDS, tuberculosis (TB) and other infections.

Global infections and the MRC in Africa

The MRC continues to be a leading partner within the European and Developing Countries Clinical Trials Partnership (EDCTP). This is the first and so far only Article 169 programme implemented by the European Commission and its member states. Article 169 of the EU Treaty makes it possible for the EU to participate as an equal partner in research and development programmes that are being conducted by several member states. The EDCTP aims to accelerate the development of new clinical interventions to fight HIV/AIDS, malaria and TB in developing countries, especially sub-Saharan Africa, through the integration of member states' national programmes.

As chair of the EDCTP general assembly and as interim CEO of the EDCTP, Dr Diana Dunstan from the MRC has overseen the appointment of a new African CEO, and developed and started to implement a new strategy/roadmap for 2007–2010. The MRC was a funding partner in two new calls for proposals in 2006/07, and will be a funding partner in a number of calls and activities planned for 2007/08. We will actively participate in the development of closer integration of member state national programmes.

In Africa, infectious diseases such as malaria, HIV/AIDS and TB are huge problems despite the increasing number and scale of initiatives to bring vaccines and effective drugs to neglected populations. The existence of new funders of health interventions and research in Africa gives us the opportunity to strengthen existing partnerships with a revised agenda, review our contribution in the context of significant players, such as the Bill & Melinda Gates Foundation, the Department for International Development (DfID), the Economic and Social Research Council and the Wellcome Trust, and to tackle challenges collectively.

The MRC is reviewing its rationale for supporting research in Africa, and its approach to long-term investment and partnership. In March 2007, there were two important consultative meetings on perspectives of Africa and the MRC 10 to 15 years from now. For the first consultation, the MRC asked the UK research community about what research would be needed to make a relevant and effective impact in Africa, and what contributions the MRC with its partners could make. The second meeting brought together advisers from Africa with a number of the MRC's UK partners, including DfID,

to determine how the MRC could effectively help to build and sustain African research institutions and leaders. Following further work, the review will be considered by the MRC's Council in mid-2007.

Transplantation

The new MRC Centre for Transplantation, led by Professor Steven Sacks, was funded under the translation centres call and involves researchers from King's College London and Imperial College London. Scientists at the centre will research ways to overcome the lack of available organs suitable for transplantation, increasing the long-term acceptance of transplants and addressing rejection issues raised by potential stem cell treatments. The centre aims to develop new ways to pre-treat donor organs and to conduct clinical trials of the methods. It will also investigate therapies to promote long-term graft acceptance without immunosuppressants, develop new imaging methods for the immune system and refine ways to evaluate indicators that predict transplantation outcome. The centre is one of six that the MRC launched in March 2006 under the translation centres call, at a total cost of £15.5m. Further information on the other centres funded through this call is on page 21.

Strategic review of virology research

The MRC's Council launched a strategic review of virology research, including the future role for the Glasgow-based MRC Virology Unit beyond the retirement of the current director, Professor Duncan McGeoch. The MRC's Council will consider the review recommendations in October 2007. Further information on the MRC's approach to strategic reviews is on page 22.

Molecular and cellular medicine

The molecular and cellular medicine portfolio includes research on cell and developmental biology, stem cell biology, cancer biology, genetics and genomics, methodology development for gene therapy, bioinformatics, biotechnology and structural studies, nanotechnology and chemical biology. In 2006/07, the MRC's estimated gross spend across the molecular and cellular medicine portfolio was £192.1m. This research is funded mainly through the Molecular and Cellular Medicine Board (MCMB), which aims to maintain a high quality portfolio of basic research across these areas in order to maintain the basis on which to build new areas of translational and clinical research.

Priorities during the year included stem cell research, radiobiology and radiotherapy, and cancer research and continuing and developing key partnerships in structural biology and supporting infrastructure for basic and translation medicine research.

Stem cell research

The MRC has continued to work with other funding bodies and industry representatives to implement the recommendations of the December 2005 UK Stem Cell Initiative Report, and has hosted meetings of the re-established UK Stem Cell Funders' Forum to support coordination of research. Following a further call for jointly-funded stem cell fellowships, the MRC committed funding to further support the development of UK Centres of Excellence, including two new long-term grants awarded to Professor Roger Pedersen at the University of Cambridge, and Professor Fiona Watt at the Cancer Research UK (CRUK) institute in Cambridge.

Phase two of the UK Stem Cell Bank's development is underway and aims to consolidate the bank's operations in new permanent facilities and provide a Good Manufacturing Practice (GMP) facility for handling clinical grade stem cell lines. Forty human embryonic stem cell (hESC) lines have now been deposited in the bank, both from the UK and overseas. In 2006 the bank released its first quality controlled hESC lines to the research community.

In addition to supporting translational stem cell research through our own mechanisms (for example, two grants under the Experimental Medicine initiative were for development of new stem cell therapies for stroke and multiple sclerosis), the MRC established a joint Scientific Advisory Board with the UK Stem Cell Foundation. The first jointly funded awards for translational research have been made.

The MRC chairs the UK Stem Cell Communications Coalition, which involves representatives from research councils, charities, regulatory agencies and government departments. The MRC and the Biotechnology and Biological Sciences Research Council (BBSRC) launched an exhibition, *Stem cell science: hope not hype*, in June 2006. The exhibition explains key messages as well as identifying the challenges related to ethical and moral acceptability of using stem cells in research and balancing public expectation with scientific reality.

The MRC and BBSRC obtained a £300k DTI grant from the Sciencewise programme (www.sciencewise.org.uk) to lead a public dialogue on stem cell research, which will start in June 2007. The MRC continues to play a leading role in the International Stem Cell Forum, which is chaired by Professor Colin Blakemore. The fifth annual meeting was held in Singapore in January 2007, at which the results of a UK-led international research programme to characterise embryonic stem cell lines were presented. These results will be used to develop a searchable database to be hosted on the UK Stem Cell Bank website. Funding of US\$2m for a second phase of the initiative was agreed at the meeting.

Radiobiology and radiotherapy research

In July 2006, the MCMB agreed a five-year funding package totalling over £25m for the new radiation biology and oncology research initiative, being developed in partnership with CRUK and the University of Oxford. This includes a significant capital contribution towards a new laboratory building which is under construction alongside the new NHS Cancer Hospital in Oxford.

Research at the centre will aim to improve radiotherapy. New researchers have been recruited to join the initiative, and existing teams from the MRC Radiation and Genome Stability Unit at Harwell and from the CRUK Gray Cancer Institute at Mount Vernon will move into the new laboratories early in 2008.

Cancer research

The board prioritised the identification and validation of possible new therapeutic targets – early translational work linked to basic research which could feed into experimental medicine studies. It awarded a new long-term grant to Professor Terry Rabbitts, who has recently moved from the Laboratory of Molecular Biology (LMB) in Cambridge to the University of Leeds to work in this area. The MRC has continued to be an active partner in the National Cancer Research Institute (NCRI), and has committed funding of £1.1m for the NCRI bioinformatics initiative.

Structural biology and support for infrastructure

The new Diamond Synchrotron at the Rutherford Appleton Laboratory became operational early in 2007. One of the board's priorities during 2006/07 was to maintain a strong portfolio of structural biology research to take advantage of the opportunities provided by this new state-of-the-art facility.

The board also has a special role in identifying and delivering generic infrastructure that supports many areas of basic and translational medical research across all of the MRC's remit, some of which are co-funded by other UK research councils, charities and other national and international organisations. Examples include the UK Stem Cell Bank,

the Mary Lyon Centre, the UK DNA Banking Network, the Human Developmental Biology Resource, the Oxford Protein Production Facility and the European Bioinformatics Institute. During 2006/07, the board coordinated a review of the activities and future strategy of the UK DNA banking network (in consultation with other MRC boards and research charities), and will take a decision on future funding later in 2007.

Neurosciences and mental health

In 2006/07, the MRC's estimated gross spend on the portfolio of neuroscience and mental health research was £108.7m. This research is funded mainly through the Neuroscience and Mental Health Board (NMHB) and covers all areas of neuroscience, from basic neurobiology, including genetics, developmental biology and pharmacology, through to systems-based research, neuroinformatics, cognition, behavioural neuroscience, psychology and clinical neurology.

During the year, the board's priorities were long-term mental health cohort studies, autism, neurodegenerative diseases, brain tissue banks and experimental medicine. Another priority was partnerships in mental health, including the treatment and prevention of common disabling disorders such as depression and schizophrenia. In addition, one of the six translation centres funded during 2006/07 was within the board's remit.

Longitudinal cohorts

Studies over long periods of time of groups of people can give valuable information on factors that may lead to mental health problems. During the year, the board reviewed longitudinal cohorts relevant to mental health and approved the creation of the first mental health cohort register. Following further development the register will be made publicly available. The board has also provided renewed funding for three important longitudinal studies.

The Dunedin Multidisciplinary Health and Development Study, renewed in November 2006, is a birth cohort which has been used in investigations of problems such as schizophrenia, attention deficit disorder and antisocial behaviour in adolescents and young adults. The research is led by Professor Terri Moffitt at the MRC Social, Genetic and Developmental Psychiatry Unit in London. The board also awarded Professor Peter Cooper and colleagues at the University of Reading renewed funding to examine the intergenerational transmission of maternal anxiety.

The board renewed the AESOP study (Aetiology and Ethnicity of Schizophrenia and Other Psychoses), led by Professor Robin Murray at the Institute of Psychiatry in London. This renewal will allow further detailed analysis of the data from the study (incorporating nearly 600 individuals with first-presentation psychosis and matched community controls), which has shown that schizophrenia is nine times more common in African Caribbeans. AESOP has also confirmed that both African-Caribbean and Black African patients are more likely at first contact to be compulsorily detained, more often via the police and less often via a GP.

Alongside these studies, the HSPHRB has funded a follow-up cohort study to the MRC Cognitive Function and Ageing Study led by Professor Carol Brayne at the University of Cambridge. This study will allow valuable comparisons across age groups and will address issues such as healthy life expectancy, prevalence and incidence of cognitive impairment.

Autism

The MRC is aiming to improve understanding and treatments of autism through a variety of approaches. One of the key aims of the MRC's strategy for autism research has been to improve research collaboration and develop integrated, multidisciplinary research strategies. An important component of this strategy was put into place in 2006. The MRC jointly funded the US\$15m (£7.5m) multinational Autism Genome Project (AGP) with the Health Research Board of Ireland and the nonprofit organisation Autism Speaks, among others. Identifying genes linked to autism could help to diagnose this condition at an earlier stage and might also identify genes which could be targeted by drugs for more effective treatment of the condition. The MRC played a key role in brokering the arrangements and assessing the science; Professor Tony Monaco from the University of Oxford's Wellcome Trust Centre for Human Genetics led the funding bid.

Another component of the autism strategy has been to fund the development of hypotheses about abnormal physiology. Professor Simon Baron-Cohen at the University of Cambridge has published evidence that there is a link between differences in fetal testosterone levels and variation in postnatal behavioural development – which, in extreme form, can underlie autistic traits. With funding from a recent MRC award, Professor Baron-Cohen will test whether such findings can be replicated in larger samples and whether autistic traits can be influenced by the number of X chromosomes.

Neurodegenerative diseases

About 750,000 people in the UK have some form of dementia, and the most common form is Alzheimer's disease (AD). The MRC has awarded a large grant to Dr John Hardy who is returning from the USA to work at the Institute of Neurology on the genetics of AD. The board made a further award to Dr Stuart Pickering Brown in Manchester to carry out further research into fronto-temporal dementia (the second most common form of dementia), specifically on the role of a protein called granulin, which he co-discovered as a major factor in the development of the disease.

Brain tissue banks

Well-characterised human brain tissue provides an essential resource for research into neurological and psychiatric disorders. In October 2006, the MRC convened a workshop to bring together interested stakeholders to discuss current strategies for the collection and distribution of such material in the UK, and how this activity must develop over the next five to ten years to help keep the UK at the forefront of international neuropathological research.

The main recommendations from the workshop were to establish a national UK network of brain banks to improve coordination, efficiency, and disease coverage, to develop a national strategy for the collection of control brain material and to develop a national systematic strategy for the collection of tissue from rarer neurological and psychiatric conditions. These activities will be taken forward in 2007 by the MRC, in close liaison with a consortium of other funders.

Experimental medicine

Under the 2006 call for proposals in experimental medicine research, managed by PSCSB, the MRC awarded seven applications relevant to neuroscience and mental health at a value of £3.42m. A further £15m is available for a second call, due to be launched in the summer of 2007.

Key partnerships in mental health

Disorders such as depression and schizophrenia are common disabling diseases with a very high health burden. The MRC is prioritising research that contributes to our understanding of how these diseases develop and ways of preventing or treating them. During 2006/07,

NMHB has continued to build its partnerships, for example through the Mental Health Funders Forum, which brings together organisations involved in mental health research to share information.

In January 2007, the MRC, the Department of Work and Pensions, the Royal College of Psychiatrists and DH organised a two-day workshop on mental health in the workplace. The workshop's conclusion was that employment is usually beneficial for mental health. Recommendations that emerged were that more evidence in this area should be assembled and that funders should also place further emphasis on research into developing interventions to prevent absenteeism and presenteeism (diminished productivity in the workplace) owing to mental health problems. This advice will be taken forward by the MRC in the coming year.

Physiological systems and clinical sciences

The MRC's estimated gross spend on its portfolio of research on physiological systems and clinical sciences in 2006/07 was £97.3m. This research is funded mainly through the Physiological Systems and Clinical Sciences Board (PSCSB), which has a broad remit that covers major public health challenges (including obesity, diabetes, cardiovascular disease and respiratory medicine) and underpins a number of key areas of health research (such as nutrition, toxicology, pharmacology and integrative physiology).

The overarching priority of PSCSB has been to build the MRC's portfolio of support for experimental medicine and associated discovery science. During the year, the board's activities involved developing and coordinating cross-board initiatives in experimental medicine and biomarkers research, musculoskeletal research, respiratory medicine, integrated physiology and mutagenesis. One of the six translation centres funded during 2006/07 was within the PSCSB's remit and the board also initiated a strategic review of toxicology research. The board has continued to work with an increasing number of partners to facilitate and support research and capacity-building. In areas such as nutrition, integrated physiology and environment and health, the board has liaised closely with other research councils; it also has close links with a growing number of medical research charities, UK higher education funding councils, government agencies (for example, the Food Standards Agency) and industry.

Experimental medicine

In 2006, the MRC committed £15m for experimental medicine research and issued a call for proposals on biomarkers (see opposite page). A further £15m has been allocated for a second call, due to be launched in the summer of 2007 – specifically 'proof-of-concept' studies in humans. In an effort to promote partnership and build research capacity in this area, the board contributed to a kidney research workshop aimed at developing experimental renal medicine in the UK.

Biomarkers

Building on the recommendations from a PSCSB international symposium in January 2006 on biomarker research, with representatives from academia, industry and the regulatory authorities, the MRC launched a call for proposals to evaluate the use of biomarkers in diagnosis of disease, disease heterogeneity and underlying mechanisms or responses to interventions. The promotion of academic-industry collaborations is a key theme. The MRC supported 18 new studies across its portfolio, representing a commitment of £9.1m, £1m of which was provided by the British Heart Foundation. All 18 applications involved some measure of industry participation. Industrial partners provided a further £7.6m of funding.

Musculoskeletal research

To expand the portfolio in musculoskeletal research, the board issued a Highlight Notice in autumn 2006. This sought proposals on research into the maintenance of musculoskeletal health, especially where the research could underpin the development of new diagnostic approaches. In particular, the MRC encouraged applications in the areas of rheumatoid arthritis, osteoarthritis, connective tissue diseases, bone disease and age-related loss of muscle mass and function. The board anticipates making funding decisions during 2007.

Respiratory medicine

PSCSB regards respiratory medicine as a leading area for funding. During the past year, the board has worked with the Infections and Immunity Board (IIB) to prioritise research on mechanisms of chronic inflammatory lung disease, the early origins of lung disease, causes of disease and the biological basis for variation in disease progression. To support capacity building in this field, the MRC has secured funding from Asthma UK, the British Lung Foundation and the British Thoracic Society (with the Morriston Davies Trust) to jointly fund 21 new PhD studentships over the next two years. The first awards have been made to scientists in Aberdeen, Edinburgh, Southampton, Manchester, Nottingham, Leicester, Glasgow, Leeds, Sheffield and London.

Integrated physiology

The board has a longstanding commitment to research at the organ, system and whole animal level aimed at promoting understanding of normal function and the physiology of disease. It has allocated £2m to the Integrative Mammalian Biology Partnership. The proposals funded under the mutagenesis call (see below) all rely significantly on integrated physiology skills such as screening for mutations that provide new insights into disease.

In June, four UK research centres (Imperial College London and King's College London, and two jointly led consortia between the universities of Manchester and Liverpool and the universities of Glasgow and Strathclyde) were awarded more than £11m to regenerate training in animal research skills for undergraduate, postgraduate and postdoctoral scientists. The awards were made possible by a funding partnership involving the MRC, BBSRC, the British Pharmacological Society's Integrative Pharmacology Fund (donors AstraZeneca, GlaxoSmithKline and Pfizer), the Higher Education Funding Council for England, the Scottish Further and Higher Education Funding Council and the DTI. The MRC contributed £2m to the initiative.

Mutagenesis

Phenotype-driven mouse mutagenesis has the potential to play a significant role in identifying new genes associated with human health and disease. In 2006, the MRC launched a call for proposals to encourage world-class, innovative proposals, which would capitalise on its investment in the mutagenesis facility at the Mary Lyon Centre at Harwell, Oxfordshire. Four new studies, totalling £4.52m, were funded on new models of bone and mineral disorders, new models of liver disease, genetic influences on immunity and inflammation and neurodegenerative disease.

Partnership in environment and human health

The MRC is a partner in the Natural Environment Research Council (NERC)-led Environment and Human Health programme along with the Environment Agency, the Department for Environment, Food and Rural Affairs (Defra), the Ministry of Defence (MOD), the Wellcome Trust, ESRC, BBSRC and EPSRC. In total, £3.3m was awarded for interdisciplinary capacity-building, including 'proof-of-concept' studies and discipline-hoppers, linking the environmental sciences with human health.

The funded studies addressed a broad range of topics including nanotoxicology and the impacts of global climate change.

Strategic review of toxicology

In July, the MRC conducted a strategic review of toxicology. The review involved representatives of academia, industry and the Medicines and Healthcare products Regulatory Agency (MHRA), who looked at the balance of MRC support against the developing needs of the area. Two reports submitted to the review panel by the Academy of Medical Sciences (AMS) (*Safer Medicines*) and the Association of British Pharmaceutical Industries (*Sustaining the Skills Pipeline*) were influential in informing the review panel's recommendations.

Taking the conclusions of the strategic review into consideration, PSCSB strongly supported the mission of the MRC Toxicology Unit and agreed that research aimed at understanding the fundamental principles of cell and tissue injury was an integral and important part of toxicology. The board also stressed the need for continued work on building stronger external links for the unit. In recognition of the shortage of well-trained, multidisciplinary toxicologists, the board agreed to support a new £2.25m capacity-building initiative which would involve academic centres of excellence, industry and the regulator (MHRA).

In line with recommendations in the AMS *Safer Medicines* report, PSCSB also agreed that plans to establish a UK National Centre for Drug Safety to improve the science of drug safety testing should be explored.

Further information on the MRC's approach to strategic reviews is on page 22.

Working with medical charities

During 2006/07, the MRC continued to work in close partnership with research charities, to share knowledge, develop areas of mutual interest and build research capacity in areas of health need.

Stem cell research continues to be an important area for the MRC and partner organisations. Accelerating translational research in this field, as well as encouraging clinical trials of new stem cell therapies, is a shared goal of the MRC and the UK Stem Cell Foundation (UKSCF). The MRC has established a joint funding mechanism with the UKSCF, advised by a joint Scientific Advisory Board, which is now reviewing a steady stream of applications aimed at developing new therapeutic approaches using stem cells. The first joint awards are expected later in 2007.

Partnerships with cancer charities have remained strong. Following the support of two National Cancer Research Institute (NCRI) Supportive and Palliative Care Research Collaboratives in 2005, the MRC, DH, Marie Curie Cancer Care, Macmillan Cancer Relief and Cancer Research UK have made awards to 11 new investigators to build capacity in the area while drawing on the scientific and infrastructure support provided by the Collaboratives. In conjunction with Cancer Research UK, the Leukaemia Research Fund and Children with Leukaemia, the MRC has contributed to the infrastructure support of the UK Children's Cancer and Leukaemia Group, one of the leading paediatric oncology groups carrying out clinical trials in the UK.

Joint funding for initiatives and individual awards has added significantly to the research the MRC has been able to support in key priority areas including autism, arthritis research, respiratory medicine and renal medicine.

In autism, a unique collaboration of international, public and private partners funding a consortium of clinicians and scientists is driving the search for genes linked to autism, which can help diagnose this condition at an earlier stage or lead to more effective treatment of the disease. Over three years, £7.5m has been allocated by the non-profit organisation Autism Speaks, the MRC, the Health Research Board of Ireland (HRB) and a number of other funders around the world to develop a better understanding of the different characteristics of Autistic Spectrum Disorder.

The MRC, the NHS and the Arthritis Research Campaign (ARC) have co-funded a pragmatic randomised trial of screening for osteoporosis in older women. The trial, led by Dr Lee Shepstone at the University of East Anglia, aims to find out if screening for osteoporosis in older women can help to reduce the number of fractures. Asthma UK, the British Lung Foundation and the British Thoracic Society (with the Morriston Davies Trust) have joined the MRC to fund 21 research studentships to build capacity in respiratory research. The first awards have been made to scientists in Aberdeen, Edinburgh, Southampton, Manchester, Nottingham, Leicester, Glasgow, Leeds, Sheffield and London.

The MRC hosted a Kidney Research UK workshop in October 2006 with the aim of developing experimental renal medicine research. The MRC and Kidney Research UK have also agreed to support two joint Clinical Research Training Fellowships (CRTF) each year, and the MRC has co-funded a CRTF with CORE (Digestive Diseases Foundation).

The MRC's own charity, the Medical Research Foundation, continued to provide support for research and training within the remit of the MRC. In 2006/07, the foundation made 30 new awards to MRC-funded researchers in universities and MRC research units, at a total value of over £600k. This represented a 100 per cent increase on the previous year's commitments and reflected the charity's new funding strategy to commit further to MRC research.

International partnerships

The growing economies of Asia are leading to a new dynamic in the globalisation of knowledge in which ideas and innovation are flowing from many new sources. To ensure that UK biomedical researchers can keep up with these changes, the MRC is looking for new opportunities to encourage and develop international collaboration and to promote interaction and exchange. Many of the new activities of the last year reported here emphasise the importance of Asian countries as potential new partners.

We are also maintaining and developing research links with Europe and playing a leading role in shaping the international research agenda. Partnerships and collaborations are key; we can achieve more when working with others. We can provide quicker scientific solutions, we can solve problems which may be difficult to tackle on our own and we can share experiences. Collaborations can also lead to increased research capacity both in the UK and in other countries, accelerating the path from research to clinical developments worldwide.

To coordinate what we do in the international arena – so that we can make the best of the current opportunities for research and create new ones – the MRC has been working on an international strategy. It has been considered by the MRC's Council and is being developed, reflecting the changes in the UK medical research environment following the Cooksey Review in November 2006.

Collaborations with Asia

To facilitate closer interactions between researchers in China and the UK, the MRC has led a project to establish a research office in Beijing, China, on behalf of all the UK research councils. This office, the first independent representational office of a public body to be established in China, will be located within the prestigious new Tsinghua Science Park. The office staff will work closely with the UK Foreign and Commonwealth Office Science and Innovation Network (FCO SIN) to act as a two-way provider of information on the research activities in China and the UK. There will be small grant schemes to support workshops between scientists with the aim of developing competitive collaborations. The MRC signed a lease agreement on the office in March 2007 and is planning a launch event for later in the year.

The MRC established a China UK Research Ethics project (CURE) with the aim of describing the frameworks of ethics as applied to medical research in China. CURE will highlight the similarities and differences between these frameworks and those applied in the UK. The project will also look at the systems available for review of medical research ethics in specific environments in the two countries and highlight similarities and differences.

In January 2007, Professor Andrew McMichael signed, on behalf of Colin Blakemore, a Memorandum of Understanding (MoU) with the Beijing Municipal Science & Technology Commission to carry out collaborative research on emerging infectious diseases. This builds on a previous agreement to work together on SARS, and will facilitate collaborative projects on new diagnostic tests, clinical trials, immune response and training.

A number of meetings between representatives of Singapore's Agency for Science Technology and Research (A*STAR) during the year resulted in a very important MoU being signed by Colin Blakemore when he visited Singapore in October. The MoU is an agreement that A*STAR will provide full financial support for students from Singapore to carry out their PhD training in MRC units and institutes. There is also agreement about supporting summer visitors and longer term fellows. This mutually beneficial arrangement underlines the strong relationship between the MRC and A*STAR and the recognition of the quality of UK biomedical science.

The UK-Singapore Partners in Science Initiative was set up in 2004 to promote scientific partnership between the two countries, with UK funding from the FCO Global Opportunities Fund. Under this scheme, the MRC funded a workshop on animal models of human disease, which brought together researchers from the UK and Singapore to exchange ideas and communicate the latest research ideas in developmental biology. The MRC anticipates that the workshop will lead to the establishment of future joint research projects, building on new interactions between individual researchers.

The MRC was one of the sponsors of the Atlas of Ideas project, which was coordinated by Demos, a UK think-tank. The final report of the project was launched at a two-day meeting in London in January and received significant press coverage and interest. The report highlights some of the individual ways in which China, South Korea and India have developed their science and innovation strategies over the past few years and provides a commentary on the opportunities for the UK to engage with these new research investments.

Collaborations with Europe

In January 2007, the European Commission launched its seventh Framework Programme (FP7). The MRC represents the UK on the Programme Management Committee for the health theme and drew on consultations during the year to shape the final outcome of the work programme. The cooperation programme in health includes a significant new area of activity aimed at optimising the delivery of healthcare to European Citizens. There are overarching strategies to strengthen research into the health of children and the elderly. The programme places great emphasis on translational research as well as the development of new technologies to produce new knowledge. Jill Jones from the MRC's International Policy section is the National Contact Point for health and organised a series of seminars to MRC establishments around the country to provide information about the new funding opportunities. Jill was invited to speak at a number of regional FP7 events and was in charge of an information stall at the official UK launch event for FP7.

Colin Blakemore became the RCUK representative on the Governing Council of the European Science Foundation (ESF), as well as the general assembly of the European Head of Research Organisations (EuroHORCs). The MRC plays an active role in the European Medical Research Councils (EMRC), a standing committee of ESF, which welcomed Professor Liselotte Højgaard, University of Copenhagen, as its new chair in September. Under Professor Højgaard, the EMRC is developing a new strategy which aims to strengthen the value of ESF for biomedical research in Europe.

Other international activities

The Heads of International (Biomedical) Research Organisations (HIROs) met at the Howard Hughes Medical Institute and at the Wellcome Trust in London during the year. HIROs welcomed India as a new member and also added representation from the Chinese Academy of Medical Sciences to the list of participating organisations.

As part of the MRC's ongoing strategy to build partnerships with counterpart agencies worldwide, we received 17 international delegations during 2006/07. These visits incorporated meetings with health ministers and their representatives, senior staff at research funding organisations and senior scientists. Scientific funding and collaboration is increasingly an international issue. By developing strong networks with overseas organisations, we ensure that the MRC is at the forefront of policy-making.

The MRC works with the FCO SIN to promote the MRC and the UK biomedical research community overseas as an attractive scientific partner. The FCO SIN has over 100 representatives based in 28 countries with the aim of strengthening the UK's scientific presence in a globalised world. The MRC meets members of the network, providing them with briefing about MRC's research strategy and mechanisms for collaboration in order that they may communicate this information in their base countries. Activities such as the workshop in Singapore and establishing the RCUK office in China are carried out in close collaboration with the FCO SIN.

International subscriptions

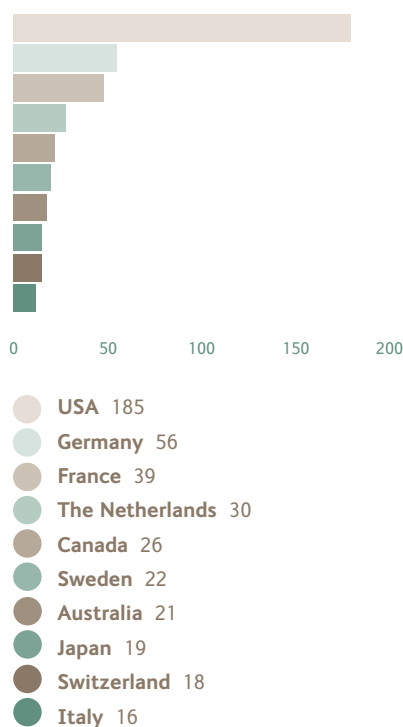
The MRC represents the UK on the governing bodies of a number of international organisations including the European Molecular Biology Conference (EMBC), the European Molecular Biology Laboratory (EMBL), the International Agency for Cancer Research (IARC) and the Human Frontier Science Program (HFSP). A recent review of the work of HFSP concluded that it 'continues to be a great success and to enjoy great prestige in the international community'. This year the MRC led the preparation of the case to admit India to the HFSP which

was unanimously accepted by the board of trustees. The MRC also provides funding to the European Science Foundation (ESF) and represents the UK on the EMRC. This year the MRC agreed to support projects for a new EuroCORE (ESF Collaborative Research Programmes) programme in mental health and stress (EuroSTRESS). The value of international subscriptions supported by the MRC in 2006/07 was £11.3m, further information is in the Annual Accounts (page 55).

Supporting international collaboration through grant funding

International collaboration in medical research is facilitated by MRC Grant Terms and Conditions which permit co-applicants and collaborators on research grants to be based overseas. To evaluate the international collaborations arising from MRC research grants we analyse information from our electronic grant submissions. As shown in Figure 2, of around 950 currently active research grants to university-based researchers, about one third report international co-applicants or collaborators. The most common partner country is the USA (33 per cent) followed by Germany (10 per cent), France (7 per cent), the Netherlands and Canada (5 per cent each). Eight per cent of international partners are from developing countries.

Figure 2: Number of instances of international collaboration on current MRC grants to HEIs (top ten countries)



Supporting research excellence

The main factors in MRC funding decisions are the quality of the research and its potential significance in terms of improving human health. The proposals we receive are stringently reviewed by a core of scientific experts, including our research boards, the College of Experts and other external expert referees both in the UK and abroad. Our annual research spend is split broadly between:

- Grants to researchers in universities and medical schools, including training awards for postgraduate students and fellows; this amounted to £264.2m in 2006/07.
- Funding for the MRC's own research institutes and units, which amounted to £298.2m in 2006/07, excluding training awards.

Supporting research in universities, medical schools and research institutes

The MRC's extramural programme supports research through a range of grants and personal awards to scientists in universities, medical schools and other research institutes. A general overview of the MRC's grant schemes is outlined below, further data on applications and awards and activities over the year are in the management commentary (page 45).

The MRC's grant schemes are designed to:

- Provide funds for: high-risk/high-impact work; studies which may be the basis of longer-term research; enhanced clinical research training; better support for 'early career' researchers; simpler, more flexible support for collaboration between grant-holders.
- Encourage multidisciplinary working, with forward-looking research strategies, greater emphasis on outputs and national needs, and greater transparency of funding and accountability.
- Target funds towards the most productive individuals and groups through a small number of grant schemes with flexible scale and duration – driven by research needs and not by funding and duration limits.
- Fund individual centres of excellence.

The MRC received almost 2,000 grant applications during 2006/07 and made 288 new awards; a breakdown of applications and awards is shown in Table 1. Information on the MRC's intramural programme is given below and studentships and fellowships are reported in the section on people (page 25).

Table 1: Applications and awards by grant type

Grant type	Number of applications	Awarded	Amount awarded (whole life value) (£m)
Centre grants ¹	21	6	8,391
Collaboration grants	8	3	1,966
Discipline hopping awards	69	17	1,504
LINK grants	1	0	-
New investigator awards/new investigator research grants ²	84	17	5,491
Research grants	976	232	133,815
Trial grants ³	25	13	20,645
Grand total	1184	288	171,812

¹ Includes renewals.

² In 2006/07 the New Investigator Research Grants scheme moved from a single annual competition to response mode with funding decisions being taken by the boards three times a year. In this transition year, the figures here represent only one board round.

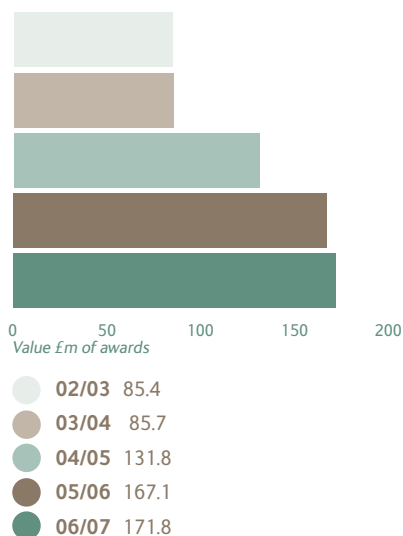
³ Invited full proposals only.

During 2006/07, all applicants received an acknowledgement of receipt and guidance on the timetable for consideration. All applications were considered by the MRC's peer review process within 26 weeks of submission and 95 per cent of applicants received feedback on proposals within seven working days of a decision being made. Details on all of the MRC's grant schemes, award rates and

information about recent awards can all be found on the MRC website at www.mrc.ac.uk/ApplyingforaGrant/index.htm.

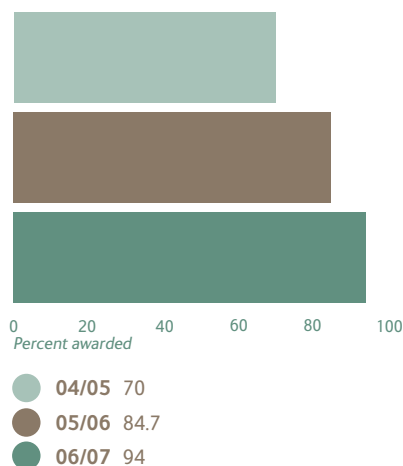
Over each of the last five years, the MRC has continued to increase the amount of money committed to new grant applications, as shown in Figure 3.

Figure 3: New grant commitment by financial year (whole life value £m)



The proportion of high-quality (internationally-competitive) grant applications that the MRC funds has also continued to increase over the last three years. We are now able to fund 94 per cent of internationally-competitive applications as shown in Figure 4.

Figure 4: Success rate of internationally-competitive grant applications



Centre grants

MRC centres are long-term partnerships between the MRC and UK universities, requiring dedicated commitment and investment from both partners. The aim of the centres is to help universities develop and sustain centres of excellence with clear strategic direction in areas of importance for UK medical research. They are created to provide intellectually stimulating and well-resourced environments which not only are attractive to established researchers but will also encourage the most able young scientists to take up a career and remain in the UK.

The aim of each centre is to add value to high-quality scientific programmes that are already supported by grants from the MRC and other funders.

Centres achieve this by:

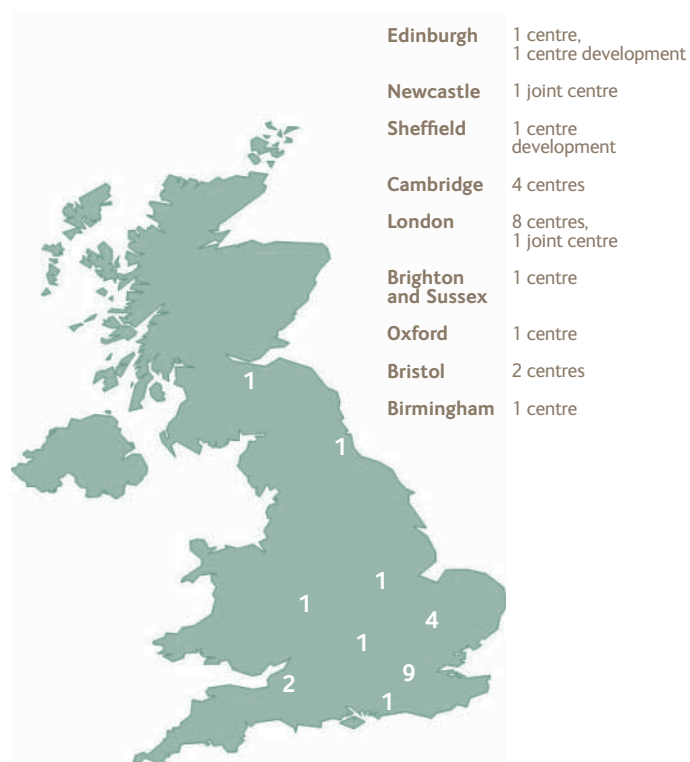
- Providing leadership in specific aspects of a field.
- Coordinating research projects and appointments to strengthen the scientific impact.
- Creating a sufficient number of researchers who, together, will benefit translational research.
- Fostering internal and external collaborations.
- Coordinating exceptional facilities to add value to research and training.
- Engaging with the public.

The MRC funds its centres over periods of five years. Funding for centre awards is usually for capacity building, translational work and new initiatives, and is tailored to the needs of individual centres. It will also involve significant investment from the university and other stakeholders, as appropriate.

During 2006/07, the MRC funded six new centres, from the 2005/06 competition for proposals for translational centres. This increased the total number of MRC-funded centres to 21. The new centres are:

- The MRC Centre for Causal Analyses in Translational Epidemiology, University of Bristol.
- The MRC Centre for Neuromuscular Diseases¹, Institute of Neurology, University College London and University of Newcastle.
- The MRC Centre for Genomics and Global Health, University of Oxford and Wellcome Trust Sanger Institute.
- The MRC Centre for Obesity and Related Metabolic Diseases, University of Cambridge.
- The MRC Centre for Transplantation, King's College London.
- The MRC Centre for Outbreak Analysis and Modeling, Imperial College London.

Figure 5: Location of MRC centres



¹ The MRC Centre for Neuromuscular Diseases, is a joint centre with Institute of Neurology, University College London and University of Newcastle.

The 2006/07 centres competition was part of a joint research council initiative on ageing (led by the MRC and involving EPSRC, BBSRC and ESRC). The call concentrates on strengthening multidisciplinary and collaborative research into lifelong health and wellbeing within the UK. Awards will be announced in March 2008.

Supporting research in the MRC's own research units and institutes

The intramural programme enables the MRC to deliver key strategic goals in a way that would be more difficult through the extramural funding programme via grants. This is because it allows the MRC to nurture areas of importance to health that are not well represented in universities, for example, in toxicology. Dedicated units enable the MRC to respond flexibly and quickly to sudden health developments or to provide special capability for translating research into healthcare and practice.

Intramural support also allows the MRC to meet strategic needs for resources, services or facilities, and enables more long-term support and more of a focus on research as opposed to other academic duties. It also supports high-quality, cost-effective research and career development and training.

The intramural programme is delivered through institutes and research units:

- **Institutes** – these have a broad but cohesive long-term (at least 15 years) inter- and multi-disciplinary approach, that avoids the more traditional university-style departmental boundaries and offers maximum flexibility to engage in innovative 'risky' research.
- **Units** – meet a scientific strategic need, providing a tailored environment in which long-term support can flourish (at least 10 years) in the context of the MRC's overall mission.

There are currently 29 MRC units and three MRC institutes, which span the spectrum of medical research and are located across the UK. There are also two centres in Africa. The three institutes, which are multidisciplinary, are the Laboratory of Molecular Biology (LMB) in Cambridge, the Clinical Sciences Centre (CSC) in London and the National Institute for Medical Research (NIMR) in London.

Reviewing the intramural programme

Work started in November 2006 to put into practice the package of intramural reviews (strategic and scientific reviews) approved by the MRC's Council in February 2006. The definition and purpose of each review is:

- **Strategic reviews** – are a formal mechanism by which the MRC can take strategic decisions about future investment in a scientific area. A review assesses intramural or extramural investment, both or none, and can apply to specific units or centres.
- **Scientific quinquennial reviews (QQR)** – validate the quality and importance of the science being carried out and the resources that are appropriate. For each unit, these reviews normally take place every five years.

The guidance and 'toolkits' for portfolio and strategic reviews will be available from April 2007, and will be piloted for scientific reviews in July 2007 for intramural reviews taking place during 2007/08.

Strategic reviews in 2006/07

Three strategic reviews were initiated this year:

- The MRC completed a strategic review of the Health Services Research Collaboration (HSRC) during 2006/07. The MRC's Council endorsed the recommendations of the review committee and agreed that, as currently constituted, the HSRC did not address future strategic needs and agreed that the HSRC should not be continued beyond the current quinquennium (March 2009).
- During the year, the MRC's Council launched a strategic review of virology research, including the future role for the Glasgow-based MRC Virology Unit beyond the retirement of the current director, Professor Duncan McGeoch.
- The MRC also conducted a strategic review of toxicology, following which PSCSB strongly supported the mission of the MRC Toxicology Unit and agreed that research aimed at understanding the fundamental principles of cell and tissue injury was an integral and important part of toxicology. The board agreed to support a new £2.25m capacity-building initiative which would involve academic centres of excellence, industry and the regulator (MHRA).

Scientific quinquennial reviews in 2006/07

The MRC carried out five scientific (quinquennial) reviews of its units during 2006/07: the Functional Genetics Unit, the Cancer Cell Unit, the Molecular Haematology Unit, the Protein Phosphorylation Unit and the Toxicology Unit. Each unit was assessed as 'internationally-competitive', and the MRC awarded funds for a further five years.

New directions

There have been changes in all three of the MRC's longstanding research institutes – the CSC at Imperial College, London, the LMB in Cambridge and the NIMR in London.

Professor Chris Higgins, Director of CSC, took over as Vice-Chancellor of Durham University in April 2007, and the MRC expects to appoint a new director in the coming year.

Dr Richard Henderson, who had been the Director of LMB in Cambridge for over a decade, decided to step down during the year so that he could devote more time to his research. He has been succeeded by Dr Hugh Pelham who was head of LMB's Cell Biology Division. Hugh had already been heavily involved in the plans to re-house the institute in state-of-the-art premises.

Sir John Skehel retired as the Director of NIMR in September 2006 and Professor Sir Keith Peters (Emeritus Regius Professor of Physics at Cambridge University) has taken on the position of interim director while the MRC seeks a new director. The MRC has decided that the institute should re-locate close to University College London so that its excellent basic research portfolio is complemented by stronger links with the clinic, the commercial sector and the physical, mathematics, engineering and social sciences.

In addition, Professor Diana Kuh was appointed Director of the MRC's National Survey of Health and Development following the retirement of Professor Michael Wadsworth in December 2006. Researchers at the unit are involved in a longitudinal (long-term) population-based study of nearly 4,000 people born in 1946.

Publication output indicators

One way of measuring the quality of MRC-funded research is with our scientists' output of publications and peer-review ratings for awards.

The first Annual Report against the Government's 10 year Science and Innovation Framework, published in July 2005, showed that in some major medical research scientific areas, the UK's share of world citations is second only to the USA. Furthermore, the UK achieved a higher level of scientific returns in terms of investment per researcher among G8 countries. Information produced by Evidence Ltd, a company that analyses research performance, showed in 2007 that the UK leads the world in its impact for health and biological sciences.

In the calendar year 2006, scientists in MRC units and institutes published 1,996 papers in peer-reviewed journals (Figure 5). Of all the collaborations that were reported, around 27 per cent involved researchers or funders from outside the UK; Figure 7 shows the distribution between continents. Around 16 per cent involved researchers or funders from the charity sector, and around three per cent involved researchers or funding from the private sector.

Figure 6: MRC intramurally-supported publications: number of peer-reviewed journals

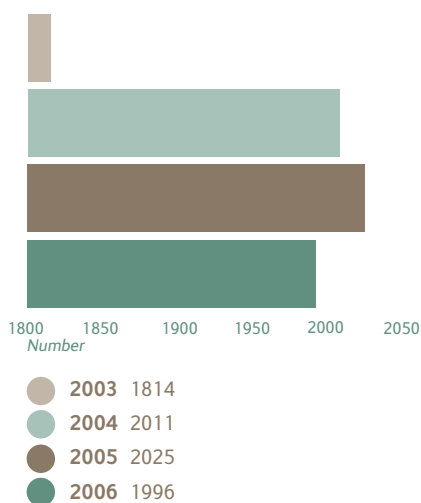
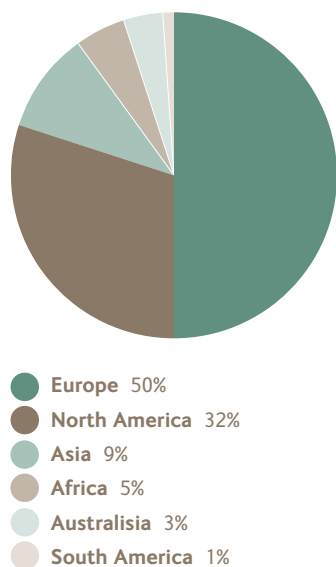


Figure 7: MRC intramurally-supported publications: international collaboration, distribution between continents





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People

Maximising human capital by training and developing staff in the research community to achieve their full potential

Continued progress in improving human health depends on creating and maintaining a diverse community of scientists and support staff able to respond effectively to new scientific opportunities and health needs. The MRC will, through enhanced targeted training and development programmes, help meet the need for skilled people.

Human resources

The MRC employs more than 4,000 staff, both in the UK and overseas through its intramural programme and in scientific training. It also supports capacity building – increasing the number of scientists – in key and evolving disciplines. The Strategic Plan for 2004–07 set out an aim to develop human resources (HR) policies, procedures and partnerships to ensure effectiveness in attracting the best researchers and continuing to create, re-locate or close its units in line with overall funding strategies.

During 2006/07, the MRC:

- Published an HR Strategy for 2006–2009, endorsed by the MRC's Council.
- Continued to evolve reward and remuneration systems that are responsive to market and performance, and cost-effective.
- Consulted on and designed a new system for intramural governance and appraisal of directors.
- Consulted on and designed a new approach to regional management to support the intramural programme, with capacity to extend this design to ongoing assessments of value-for-money of all MRC investments.
- Continued work with research units and institutes with a programme of business training for HR staff. Began to support directors in maximising achievement through management and development of employees, with a 'toolkit' – a collection of information, resources and advice – called People Planning.
- Consulted on and published schemes and action plans to support race and disability as part of our diversity programme.
- Established the design of a new SAP HR system which will be implemented in 2007 as part of the MRC's enterprise resource planning solution to provide high-quality management information, and improve decision-making across the MRC.
- Worked jointly with the other research councils on the pay harmonisation and Research Councils UK Shared Service Centre project initiatives.
- Continued our aim of improving the accessibility and transparency of our policies and procedures by re-writing and re-launching our key set of HR policies.
- Maintained an overview of the outcomes of stress audits and other indicators of workplace stress across the intramural programme, including an overall action plan. Continued to apply the Investors in People 'diagnostic toolkit' to further units as part of the wider programme to achieve accreditation of all units.

- Implemented a programme of career development workshops for employees in bands 4–7.
- Released an e-learning tool and NVQ2 package for animal technician employees.
- Continued to introduce the Employee Assistance Programme across units as a valuable source of employee (and family) support.
- Designed and launched a corporate induction tool, available to all new starters across the MRC portal.
- Prepared a strategic plan to support our Women in Science initiatives to be implemented under the gender diversity scheme and action plan in 2007.

Diversity and equal opportunities

The MRC values the diverse skills and experience of its employees and is committed to achieving equality of treatment for all. It is our policy to ensure that no applicant for employment by the MRC, and no employee of the MRC, receives less favourable treatment than another or is disadvantaged by requirements or conditions, which cannot be shown to be justifiable, on the grounds of sex, sex reassignment, race, creed, ethnic or national origin, colour, disability, sexual orientation, marital status, religion or philosophical belief. The average number of disabled persons employed at any time during the year was 59.

In 2006 we published our race and disability schemes. As part of this process we consulted widely with our employees, trade unions, those in other research councils and with several external representative groups. We established three committees to review our practice with respect to corporate governance and communications, science guidance and funding and human resources and procurement. The committee members are a cross-section of MRC employees. They are responsible for bringing our schemes to life and for ensuring that in addition to implementing the relevant action plans, we also build our equality principles into a wide range of our business activities.

Just over 1,000 permanent employees joined the MRC during 2006. Of those, 56 per cent were women. We have continued to attract employees from a wide range of ethnic backgrounds, as shown overleaf in Figures 8 and 9.

Figure 8: New starters 2006 – sex analysis

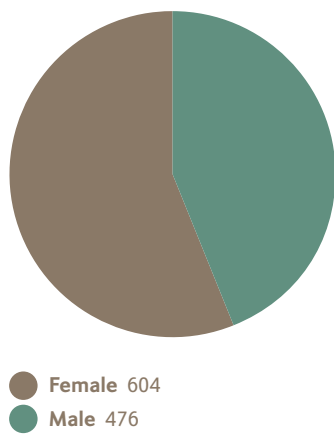
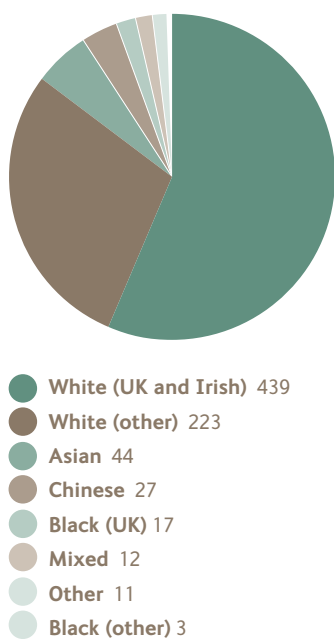


Figure 9: New starters 2006 – ethnic group analysis



Based on 776 new starters who reported ethnic origin.

We have an equal opportunities subcommittee which audits our employee data annually to ensure the aims of the MRC's policies and practices are being achieved in a fair and equal manner, and to identify any imbalances that may need to be addressed.

MRC policies and practices are regularly monitored to ensure that they are sufficiently flexible to support diversity across all career paths. We aim to offer a competitive employment package that provides an appropriate balance between work and non-work commitments.

Research training

Medical research needs a well-skilled workforce to maintain a healthy science base, and the MRC has a strong programme of research training and career development schemes for both clinical and non-clinical scientists. Enhancing capacity in key areas of research, and building on and creating new partnerships with other organisations

is an essential part of the programme. All this is overseen by the Training and Career Development Board which advises the MRC's Council on research career and training policy issues. In 2006/07, the MRC made new commitments of over £72m. Of this, around £29m was to support over 400 new post-graduate students and around £43m was for 98 fellowships.

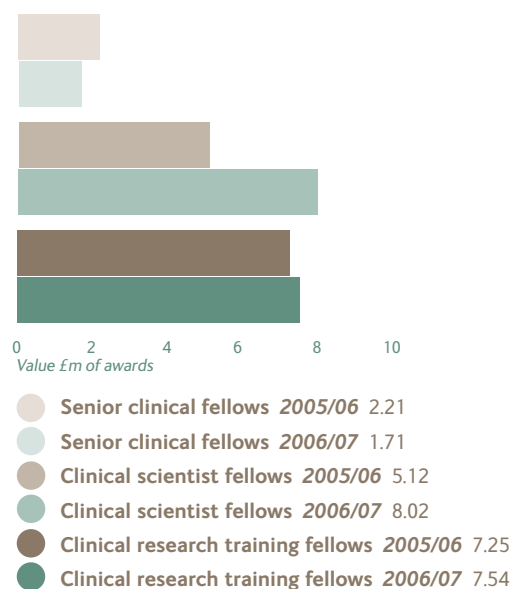
During the year, the MRC carried out a wide-ranging review of its investment in training, which the MRC's Council discussed in early 2007. The Council endorsed the primary recommendations for continued and increased investment in research training and career development awards and placed greater emphasis on partnerships with industry, charities and professional bodies. It also agreed that there should be more collaborative training with industry and increases in investment in clinical and translational research, experimental medicine and interdisciplinary research. There was a consensus for a more strategic and coordinated approach to training, and a better system for measuring outputs.

Clinical and public health research

This year, the MRC enhanced its commitment to training the next generation of clinical academics by increasing the number of clinical training fellowships available. During the period, the MRC awarded 56 new clinical fellowships, contributing £17.3m, including 45 clinical research training fellowships (CRTFs). In addition, the MRC committed funding for 11 health services research and health of the public research fellowships, and two awards in the newly launched biostatistics career development fellowship scheme. The MRC was also able to secure co-funding for nine awards from charities and Royal Colleges and two by the Welsh Assembly, together worth over £1m.

Overall, the MRC made 10 additional clinical and public health research awards compared with 2005/06 and increased its investment by £1.5m. Figure 10 shows the value of the clinical fellowships awards made during 2005/06 and 2006/07.

Figure 10: Value of clinical fellowship awards in 2005/06 and 2006/07



Following a review of the MRC's clinical fellowship schemes, the MRC's Council plans to provide funding for 50 CRTFs next year and introduce the option of a four-year CRTF to facilitate clinical/patient-oriented or public health research.

The six centre grants awarded under the call for translational research centres all included an emphasis on research training.

A new partnership between the MRC, the Department of Health and the Economic and Social Research Council (ESRC) has been exploring ways to address the shortage of health economists. The MRC expects that further details will be available during 2007/08.

Non-clinical fellowships

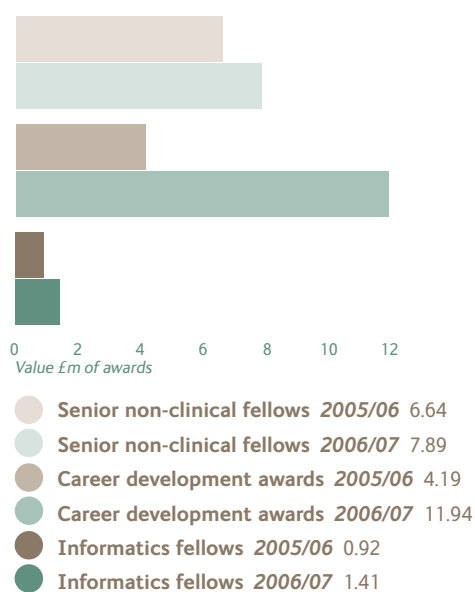
The MRC is committed to maintaining a broad base of highly skilled and trained researchers across the full range of medical research. We continued to fund highly competitive proposals for fellowships for non-clinical researchers and increased support to £21.2m, as shown below.

The MRC's two main schemes are:

- Career development awards, which provide up to five years' support for outstanding post-doctoral researchers who wish to make the transition from post-doctoral research trainee to proven independent investigator.
- The senior non-clinical fellowship scheme, aimed at non-clinical researchers of exceptional ability who demonstrate promise as future research leaders.

In addition, the MRC ran a special training fellowship, supporting specialist multidisciplinary training aimed at creating a research workforce able to take forward new developments in bioinformatics, neuroinformatics, and computational biology. Figure 11 shows the value of the non-clinical fellowships awards made during 2005/06 and 2006/07.

Figure 11: Value of non-clinical fellowship awards 2005/06 and 2006/07



Interdisciplinary research

The ESRC and MRC joint scheme has been developed to fund interdisciplinary research students and post-doctoral fellows whose research is of interest to both research councils and which requires the combined approaches of both the medical and social sciences. In 2006/07, the MRC co-funded 10 such fellowships worth £750k.

Studentships

The majority of the MRC's investment in studentships is made via doctoral training awards (DTAs) to universities (£12.5m in 2006/07). The amount each university receives is based on its existing grant income from the MRC. This is a relatively new approach for the MRC and, to ensure that the process is working as intended and to provide guidance on future strategy, the MRC convened a working group on DTAs in 2006. The group made a number of recommendations on how to improve the management of DTAs. The MRC will be implementing these changes in the coming year, and in particular will be reviewing whether there are alternative models for making awards that can enhance the strategy for training future researchers.

In response to the Roberts' Review in 2002 on the supply of science and engineering skills in the UK, we have provided additional funding for universities through the DTAs to enable them, if appropriate, to offer more PhDs of four-year duration.

Post-graduate research funding in areas of high scientific priority

In addition to the DTAs, the MRC also runs a capacity-building competition in areas of strategic importance identified by the research boards as requiring specific investment. In 2006/07 these included public health, health economics, infections, dementias, pre-clinical imaging, stem cells, informatics and respiratory medicine. This year the MRC made awards to start in both October 2007 and October 2008, with over 50 new awards for each year worth in excess of £7.5m. All students will receive enhanced stipends to assist recruitment and retention in these areas.

In respiratory disease, the MRC worked in partnership with three charities – Asthma UK, The British Thoracic Society (along with the Morrison Davies Trust) and the British Lung Foundation. We also made a further 10 awards to promote collaboration between universities and industry and jointly funded new studentships with the ESRC and the Engineering and Physical Sciences Research Council (EPSRC) for interdisciplinary research training.

Figures 12 and 13 overleaf show the value of studentships awards in 2006/07 and the number of students starting in October 2007, compared with October 2006.

Figure 12: Value of studentship awards 2005/06 and 2006/07

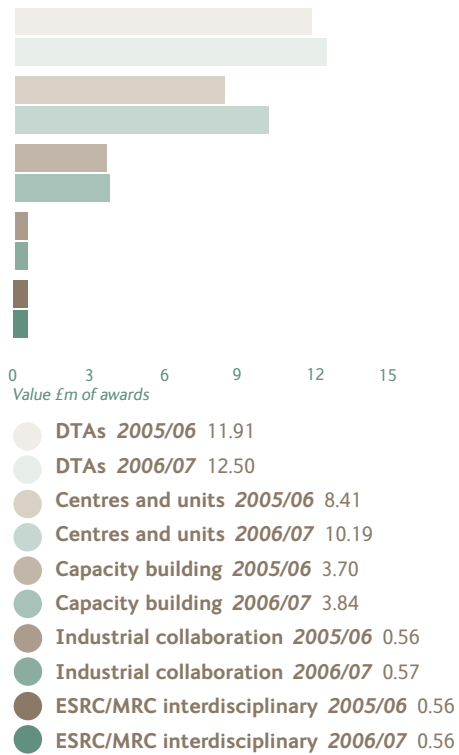
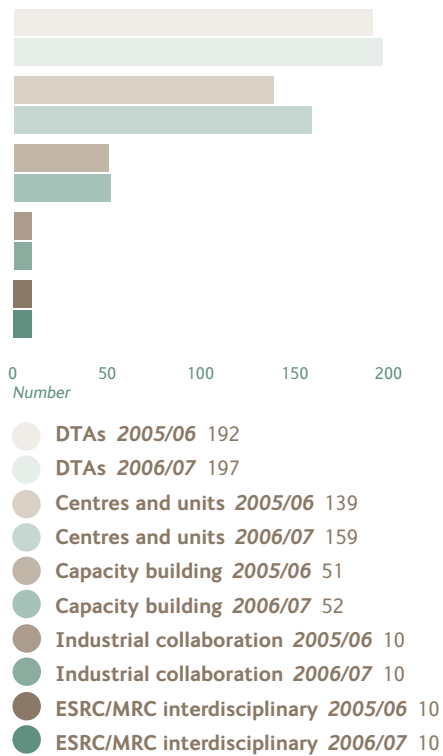


Figure 13: Number of studentship awards at October 2006 and estimates for October 2007





Bringing discoveries to the market

Promoting knowledge transfer and the commercial exploitation of discovery science, to improve health and prosperity

Development of improved healthcare products and services depends on the rapid and effective transfer of inventions into industry. The MRC will achieve this through strategic alliances with existing firms, in partnership with universities, and by nurturing MRC start-up companies.

Translating research into healthcare

Translating research into healthcare improvements and enhanced economic prosperity is central to the MRC's mission. Responsibility for the exploitation of the output of research in the MRC's units and institutes lies principally with MRC's affiliated company, MRC Technology (MRCT). MRCT has direct responsibility for technology transfer from the MRC's own staff in units and institutes and in recent years has generated substantial financial returns. MRCT has initiated a series of new measures to further enhance its productivity.

Income to commercial fund

Once again we have had a good year in terms of income to the commercial fund. Licensing income increased by £12.4m, from £34.2m in 2005/06 to £46.6m for 2006/07. As well as a further rise in revenues from the 'Winter 1' patent estate (antibody humanisation by CDR – complementarity determining region – grafting), the MRC received substantial one-off cash sums from equity held in Cambridge Antibody Technology (acquired by AstraZeneca) and Domantis (acquired by GlaxoSmithKline). Cash receipts from all sources reached £65m during the year, bringing total cash generated since 1998 to £299m. In addition, after the year end the MRC received a one-off payment of £27m from Genentech in respect of a fully paid licence relating to intellectual property rights as they apply to certain monoclonal antibody therapeutic products.

A summary of MRCT performance for the year ended 2006/07 is shown in Table 2 below. The reduction in receipts from 2005/06 is due to an exceptional one-off payment received during this year with respect to future royalties from Humira.

Table 2: MRCT performance table

Year	New patent filings	New licences	Receipts (£k)
98/99	40	25	2,853
99/00	32	26	7,582
00/01	34	36	17,946
01/02	50	42	11,713
02/03	41	32	14,181
03/04	28	26	15,920
04/05	24	24	22,005
05/06	25	40	141,957
06/07	25	39	64,769
	Total		298,926

Patent portfolio

MRCT has an experienced team active in the protection, management and partnering of MRC Intellectual Property (IP), mainly in the form of filed and granted patents. Each MRC unit and institute has a designated Technology Transfer Manager responsible for IP identification, management and licensing. MRCT's commercially experienced staff assess invention disclosures for patentability and commercial value and use external patent agents to advise on patent filing and management. In 2006/07, MRCT filed 25 patent applications and granted 15 patents. The overall patent portfolio has 117 patent families and cost £1.1m to maintain in the financial year.

Development Gap Fund

The Development Gap Fund (DGF) is a translational fund managed by MRCT, designed to increase the commercial potential of MRC discoveries and intellectual property. It offers pre-seed funding to MRC scientists to help early-stage ideas and inventions progress towards commercialisation and patient benefit. This year, DGF received 25 new submissions from eight different units, resulting in eleven projects being funded at a cost of £960k. The average size of investment was £87k with a project duration of between six and 24 months.

DGF-funded projects cover a substantial portion of the scientific spectrum supported by the MRC, including cancer, diabetes, infectious diseases, genomics and drug discovery. The total number of projects funded by DGF is 34, costing £3.5m – the original budget was £4.5m. A recent interim assessment of fund activity and outcomes showed that a number of economic and non-economic outcomes are emerging as a result of the fund, namely:

- New patents have been filed and supporting data generated.
- DGF has created financial leverage attracting co-investment for translational research from third parties including venture capital investment of £1m.
- Formation of two new companies to exploit technologies funded by DGF with the overall objective of discovering new chemical entities and to progress these to 'proof-of-concept' studies in humans.
- Enhanced value resulting from the interaction between DGF and other translational activities of MRCT.
- DGF has created skilled jobs and contributed to the core research activities of units.

- The establishment of an entrepreneurial culture within MRC units and institutes with an increased awareness and appreciation of the protection of IP and of translational research.

Business development

MRCT strives to build and maintain good business relationships with a large range of pharmaceutical and biotechnology companies. It uses a number of tools to assist in this activity, including business intelligence data, targeted marketing campaigns, exhibiting at partnering and trade shows and, most importantly, personal contacts. MRCT has made 39 agreements in the period, generating £540k of new revenue in addition to the revenue from existing contracts.

MRCT initiated a series of financial audits of high-value licences. Although these audits have not identified substantial shortfalls in expected versus actual revenues, it is important that the now substantial royalty streams are properly monitored.

Licensing and agreements

The Licence and Agreements Division supports and advises the MRC and MRCT in relation to all types of agreements relating to IP exploitation. Over the past year, commercial agreements were concluded with Abbott (USA), Kaketsuken (Japan), Merck (Germany), SignalChem (Canada), BioArctic (Sweden), Gingko (Japan) and New England Biolabs (USA). In addition, 29 EU Framework Programme 6 collaboration agreements, and 15 multi-party non-EU Framework collaboration agreements were signed.

Industry showcase events

In 2006, the MRC and MRCT launched a programme of 'showcase' events to highlight the science that is funded by the MRC, and to enhance our ability to develop partnerships with industry (www.mrcshowcases.org). Each showcase is a two-day conference based around one of the MRC research boards and includes oral presentations, poster sessions and opportunities for networking. To date, GlaxoSmithKline, Pfizer, AstraZeneca, UCBCelltech, Organon, Roche and Novartis have participated in these events. The MRC has committed a £3m fund, in its Pilot Industry Collaboration Award Scheme, to support collaborative projects between MRC-funded academics and the industrial participants of the showcase events.

Optical projection tomography

MRCT has used its laboratory facilities in Edinburgh to support the development and commercialisation of optical projection tomography (OPT). We believe that OPT has the potential to be a 'disruptive technology' – a new technology that unexpectedly displaces an established technology – which will revolutionise microscopy. A team of five MRCT scientists has worked on the development of sample preparation techniques, creating a clinical collaboration with Ninewells Hospital in Dundee. They have managed the creation, testing, marketing and sale of a commercially viable instrument, the OPT3001, 13 of which have been sold in eight countries. The instrument is CE-marked for sale in the EU.

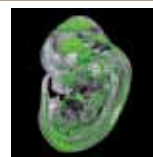
Figure 15: OPT scanner 3001



Figure 16: 3D image of adult mouse lung showing blood vessels.



Figure 17: 3D images of 12.5 day-old mouse embryo using antibody staining.



Fast tracking drug discovery

Drug Discovery Group

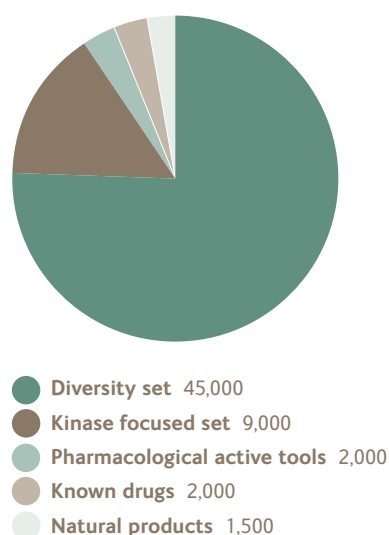
Over the last 12 months, the Drug Discovery Group (DDG) has made considerable progress and currently has 13 active programmes. Several of these involve 'hit-to-lead' chemistry, which is the process of testing many compounds in a chemical screen and identifying 'hits': compounds that are suitable starting points for drug development programmes for a particular target. These hits are then optimised by medicinal chemistry, resulting in a smaller number of more refined 'lead' molecules – the most likely to be turned into clinical candidates or potential drugs.

The most notable activities of the DDG were in the following areas:

- Building a 'lead-like' diverse set of screening compounds for identification of starting points for medicinal chemistry programmes, including a library of molecules targeted towards kinases, a type of enzyme, built in collaboration with the Wellcome Trust in Dundee, Scotland.
- Developing 12 screening assays over the year and running seven full screens against the DDG compound collection to identify starting points for programmes on tuberculosis, malaria, influenza, hypertension and others.
- Running three projects in 'hit-to-lead' chemistry, and five projects in hit 'profiling', which is the characterisation of hit compounds to confirm that they have potential.
- Identification of 'tool compounds', which are chemical probes that enable further characterisation of biochemical pathways.
- Capitalising on MRC groundbreaking research to initiate *in silico* screens – computational techniques to identify suitable chemical starting points – and *de novo* design of chemical starting points for drug discovery.
- Providing advice to MRC scientists on developing assays suitable for screening, and on collaborating with DDG. Also advising scientists within MRC units on the setting up and running of virtual screening and supporting compound selection and synthesis for chemical genomics programmes, in which scientists use chemical probes in animal models to test possible links between particular biological targets and disease.
- Transferring an assay and reagents to our collaborators at the National Centre for Drug Screening in Shanghai, China, and completing a further diversity screen of over 100,000 compounds (including natural products), initially for malarial drugs with the possibility of extending screens to other disease treatments.

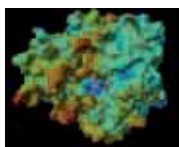
The DDG has built a substantial in-house screening compound collection based on adherence to a set of 'lead-like' properties devised from analysis of similar data from known drugs, coupled with a set of filters to remove unwanted or unattractive structures. Subsets of this collection are made available to MRC scientists to screen in their laboratories to find tool compounds.

Figure 18: Makeup of current DDG screening library



One example of DDG activity is a collaboration with Dr Alan Hay, Dr Steve Gamblin and Professor Sir John Skehel at the National Institute for Medical Research (NIMR) in London. They have recently published the crystal structure of influenza neuraminidase N1, one of two major surface structures on the influenza virus. This has been used to develop virtual screening methods to assess over 200,000 compounds as inhibitors of neuraminidase. Evaluation and screening of *in silico* hits is now underway, with the aim of providing a starting point for a drug discovery initiative.

Figure 19: X-ray structure of Tamiflu and neuraminidase N1. Tamiflu is an inhibitor of neuraminidase.



Over the last year, the DDG projects have covered a range of indications/disease areas, including infectious diseases (with four projects in the 'neglected diseases'), metabolic disorders, oncology, neurodegeneration, inflammation and cardiovascular illness. Target classes have covered 'druggable' targets such as G-protein coupled receptors (GPCRs), kinases and proteases, as well as more challenging target molecules such as ubiquitin ligases and protein-protein interactions.

Figure 19: Indications covered by current DDG projects

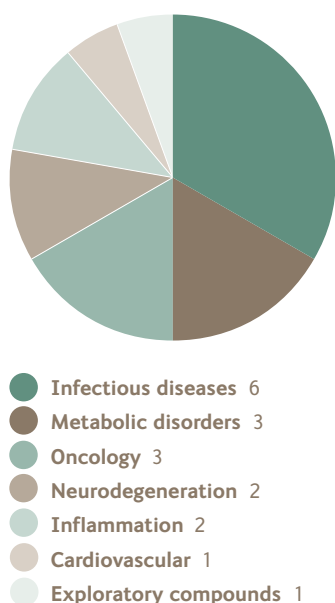
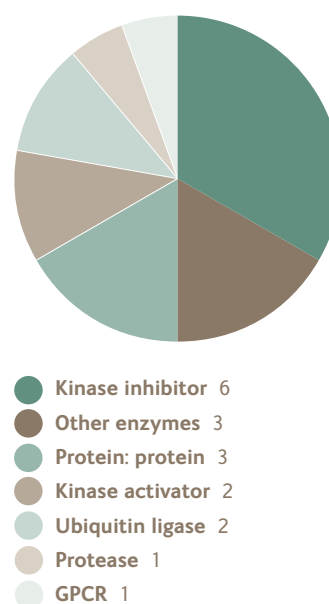


Figure 20: Target classes covered by DDG projects



Therapeutic Antibody Group

The Therapeutic Antibody Group (TAG) has continued to work with the MRC and industry to exploit its world-renowned antibody engineering expertise. In particular, TAG is recognised for its antibody humanisation skills, which has helped several therapeutic antibodies to reach the clinic and two humanised antibodies (Tysabri® for multiple sclerosis and Actemra® for Castleman's disease) to reach the market in recent years. Antibody humanisation was invented and patented at the MRC and is now responsible for the majority of the therapeutic antibodies currently used to treat a wide range of life threatening and debilitating diseases.

TAG continues to collaborate with biotechnology companies to assist in the development of humanised antibodies. In the past year, TAG helped BioArctic Neuroscience (Sweden) in the development of a potential new treatment for Alzheimer's disease, and Gingko Biomedical Research Institute (Japan), which is aiming to create a novel antibody-based treatment for systemic lupus erythematosus.

The group is also working with Dr Arvind Patel at the MRC Virology Unit in Glasgow to develop a new antibody-based treatment for hepatitis C (HCV). This humanised antibody is novel in its approach since it is able to recognise multiple genotypic variants of HCV, potentially broadening its worldwide clinical usefulness. In addition, TAG is working with Dr Andy McKenzie at the Laboratory of Molecular Biology (LMB) in Cambridge to create a humanised antibody for a novel target which could help in the treatment of inflammatory diseases, such as asthma.



Engaging with people

Fostering dialogue and building stakeholder involvement in MRC decision-making, and explaining the link between research and improved health

Acceptance of and support for medical research from the public depends on encouraging dialogue and building trust. The MRC promotes such dialogue by providing consultation channels through which the public and other stakeholders can influence MRC decision-making, by encouraging scientists to engage with the public, and by explaining the link between research and improved health. Much of this is achieved in partnership with other organisations.

Public engagement

During 2006/07, the MRC communications team continued to implement the MRC's strategic objectives to foster dialogue and stakeholder involvement to help inform MRC decision-making, to support and encourage our scientists to engage with the public, and to explain and promote the link between research and the health of the public.

We built on existing programmes and activities and developed a number of new initiatives. During their first full year of activities, our four regional communications managers were responsible for creating a wide range of opportunities for our scientists to fulfil their public engagement commitments. These included media and communications training, participation in national activities such as the Researchers in Residence scheme (which involves PhD students undertaking placements in schools), the first career development fellows' conference, and participation in science festivals. MRC Head Office-based activities included our busy and proactive press work, parliamentary work and increasing integration of print, media and online communication.

We continued to work proactively with other organisations and funders. In March, the Government announced an award of £300,000 to the MRC and the Biotechnology and Biological Sciences Research Council (BBSRC), from the Sciencewise initiative (www.sciencewise.org.uk), to develop a programme of dialogue activities around the science and issues of stem cell research.

Fostering dialogue

We continued to develop methods to create and sustain dialogue between ourselves and the public. We have built up a range of mechanisms to be able to successfully capture and use public opinion and attitudes in developing our corporate and communication objectives.

MRC public meeting

In July 2006, around a hundred charity representatives, members of the public and other stakeholders attended the MRC's public meeting at One Great George Street in Westminster, London. The meeting was an opportunity for the public to ask members of the MRC's Council questions about the MRC's work. Colin Blakemore, Chief Executive

of the MRC, launched the publication of the *MRC Annual Review 2005/06* with a presentation of the MRC's achievements. This was followed by a panel discussion on the results of the BBSRC/MRC Ipsos MORI consultation on research into ageing (see below). Panellists included Lord Sutherland of Houndwood, chair of the recent House of Lords Science and Technology Committee report on ageing.

Supporting our scientists in public engagement

Feedback from our public engagement activities has shown that access to scientists undertaking cutting-edge research is the most important factor in encouraging members of the public to take part in science-related events. We continue to provide support, encouragement, opportunity and training for our scientists in enabling them to fulfil their obligations to communicate their science.

Consultation

Public consultation on ageing research

In 2005/06, the MRC and the Biotechnology and Biological Sciences Research Council (BBSRC) commissioned the opinion research organisation Ipsos MORI to undertake a public survey on attitudes to scientific research into ageing. The results, published in July 2006, showed that the issues that most concern the public are improving quality of life, preventing future problems, and looking for cures. Many felt that quality of life is an important aim for research.

The results of the consultation have helped the MRC in its support for multidisciplinary groups in the cross-research council New Dynamics of Ageing programme. We are also taking the lead in developing cross-council plans in the context of the Comprehensive Spending Review 2007. The MRC plans to launch and manage an initiative with other research councils to jointly fund research centres in ageing in 2007/08. This initially cost £12m.

Public consultation on the use of personal health information

Following a recommendation in the Academy of Medical Sciences (AMS) report on the use of personal health information in medical research, the MRC commissioned Ipsos-MORI to undertake a public survey of attitudes and awareness of this issue. The survey, involving qualitative focus groups and quantitative research, provided an

insightful snapshot of public experiences, understanding and attitudes towards the use of personal data in research.

We are working together with the Wellcome Trust, which has commissioned a similar public attitudes study on research governance that includes the use of personal health information, and with other UK Clinical Research Collaboration (UKCRC) partners who have an interest in this area.

Both the MRC and the Wellcome Trust studies have shown that, in general, people view medical research positively, and the more informed they are about the purpose and benefit of research using personal health information, the more willing they are for their personal health information to be used. The issue of anonymity and consent feature highly in the debate over what information should be available, to whom, and in what circumstances. These two themes, in addition to communication about the benefits of research, are central to building trust. These studies help us to further build awareness, take account of concerns and to communicate the importance of this type of research.

Public involvement

During 2006, we undertook an audit of public and patient involvement (PPI) in MRC activities. Our findings showed that the most successful examples were those that involved 'lay experts' – patient and public representatives selected with a specific task or activity in mind, such as membership of a steering group or participation in a workshop. In order to build on this, we have been developing a model for public and patient involvement which builds on the work of the MRC's advisory group on public involvement. This will take the form of a panel of such specialists who are willing to be called on to undertake specific activities.

The MRC continues to work with other organisations under the banner of UKCRC to identify best practice and opportunities for joint working in the area of patient and public involvement. During 2006, we were involved with other UKCRC members such as INVOLVE in the creation of a new website called People in Research (www.peopleinresearch.org) which aims to help members of the public make contact with organisations that want to involve them actively in clinical research.

Events and activities

The MRC once more played a high-profile role in the Cheltenham Science Festival in June 2006. To mark the festival's fifth anniversary, three of the big science issues from 2001 were revisited: cloning, human genetics and electricity, in a series of lectures entitled *Five Years On*. The MRC sponsored *Genetics – Five Years On*, an evening of talks hosted by Lord Winston with contributions from MRC scientists. Our scientists also ran two experiments on a purpose-built stand in the festival's *Discover Zone*.

Partnerships in communication

Working closely with other organisations is an important component of our public engagement work and underpins many of our activities. For example, we are partners in Research Councils UK (RCUK) and work with the other UK research councils actively to raise public awareness of, and engagement with, science and innovation. We continued to provide funding and input to RCUK-administered projects such as Researchers in Residence, the Nuffield Bursary

Scheme and the British Association for the Advancement of Science (BA) Perspectives scheme, where several MRC-funded PhD students took the opportunity to present posters on their work to visitors to the BA's annual festival of science in Norwich.

In collaboration with BBSRC, under the RCUK banner, the MRC has developed a travelling exhibition on the science and issues of stem cell research. Entitled *Stem cell science: hope not hype*, the exhibition was launched at a parliamentary event in June 2006. It toured the country for the remainder of the year, visiting science centres in Newcastle, Edinburgh, Glasgow and Dundee as well as the Scottish Parliament. In many of these places the exhibition formed the backdrop for dialogue and debate between scientists and the public.

We are active members of a number of issue-specific communication partnerships including the Coalition for Medical Progress, which aims to explain the medical benefits of research using animals.

Working with parliamentarians

As part of our efforts to build sustainable dialogue with parliamentarians in both Houses, the MRC plays an active part in the all-party parliamentary group on medical research. Chaired by Lord Turnberg, with the secretariat coordinated by the Association of Medical Research Charities, the all-party group brings together some of the main organisations involved in medical research in the UK. Meetings this year have included topics such as the use of animals in research, measuring the socioeconomic benefits of health research, and Sir David Cooksey's review of UK health research.

In addition, the MRC continued to use formal and informal methods for liaison and dialogue with Westminster and Scottish parliamentarians and other policy-makers. During 2006/07, the MRC continued to contribute to public policy in matters related to medical research through written submissions and oral evidence to Parliamentary Select Committee Inquiries and consultations conducted by government departments, regulatory bodies and the European Commission. Significant consultations to which the MRC has provided evidence during 2006/07 included the Treasury review of UK health research, the House of Commons Science and Technology Select Committee Inquiry on Research Council Institutes, and the House of Lords Science and Technology Select Committee Inquiry on Allergies. Further information on consultations that the MRC has contributed to during 2006/07 can be found on our website at www.mrc.ac.uk/PolicyGuidance/PublicEvidence/MRC00567. A summary of contributions submitted during 2006/07 is shown in Table 3 below:

Table 3: MRC contributions to consultations

Body	2006/07 submissions
Select Committee inquiries	12
Government consultations	10
Parliamentary parties	2
Regulatory bodies	3
European Commission	2

Explaining the link between research and the health of the public

Print and web communications

The new MRC website was launched in October 2006 after several months of research and development work. The site has a new design, revamped content and an improved navigational structure. It offers a number of useful new features such as RSS news feeds and an email newsletter. New features such as a consultation and online survey facilities are in progress.

During the year, the print communications team produced more than 50 publications and event support materials and advised a range of MRC Head Office groups on their publications needs. Examples included the *MRC Annual Review 2005/06*, on key MRC scientists' achievements and the collaborations that helped speed translation of discoveries into benefits for health, and *MRC Network*, our quarterly newsletter for MRC-funded scientists and opinion-formers, which we have continued to develop and modernise following its re-launch in summer 2005.

We produced two publications aimed at the public and other key stakeholders – one on MRC research in Africa, *Improving Health, Improving Lives*, about the important work of MRC units in The Gambia and Uganda, and the other on stem cells, *MRC Research for Lifelong Health – Stem cells*, which looked at both the science and the potential health benefits.

As part of our aim to communicate the wider benefits to society of our research outputs, we are producing 'case studies' – termed *Stories of discovery*, published on our website. (The OSI requires these periodically for use in Department of Trade and Industry publications and as scientific briefings). Stories on the following subjects were published on the website during the year:

- Antithrombotics**
- Cancer screening**
- Cystic fibrosis**
- Deep brain stimulation**
- DNA research**
- Folic acid**
- Infections in Africa**
- Leukaemia**
- Medical imaging**
- Mosquito nets**
- Newborn hearing screen**
- Smoking**
- Statins**
- Therapeutic antibodies**

Working with the media

During 2006/07, the MRC continued to achieve high levels of coverage in print, broadcast and online media about our work and achievements. For example, research which showed preserved conscious awareness in a patient in a vegetative state received wide coverage as did coverage of issues as varied as drug addiction, stem cell research, and research into CJD. The MRC press team, with the help of the regional communication managers, has continued to develop relationships with researchers in our units, institutes and centres to uncover research of potential interest to the press. The regional communications managers are also helping the press office offer media training opportunities to researchers and other staff, from introductions for the novice to honing the skills of seasoned performers. The press office provides daily news briefings

for scientists about media coverage of science in general and the MRC in particular. This briefing provides opportunities for scientists to catch up on and respond to news they may have missed. In March, the MRC and Wellcome Trust held a one-day conference which explored ways for press officers from universities and funding bodies to share good practice, work effectively on stories with multiple partners, and promote the best stories and scientists in the media.



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Good research practice and efficiency

Setting standards and effective business practice

The MRC has a national responsibility to provide advice on good practice in medical research, including ethical issues raised by research in humans, by new scientific developments, and by the use of animals. We are working in partnership with others to reduce the excessive regulation which produces a bureaucratic burden without corresponding benefit. We are also working to improve our operational effectiveness and performance management.

Good research practice and ethics

The MRC has an important role in research governance in setting standards, promoting good practice, supporting the regulatory framework and in increasing access to the outputs of publicly funded research.

Research ethics

The Nuffield Council on Bioethics, based in London, examines ethical issues raised by new developments in biology and medicine. Established by the Nuffield Foundation in 1991, the Council is an independent body, funded jointly by the Foundation, the MRC and the Wellcome Trust. During 2006/07, the MRC renewed its funding for the Nuffield Council on Bioethics at a level of £1.15 million each year for five years, starting on 1 January 2007.

The MRC continues to be a funding partner of the Global Forum for Bioethics in Research, which hosts an annual conference bringing together delegates from the developing and developed nations to debate the ethical issues surrounding international collaborative research sponsored by industrialised countries and carried out in developing countries.

The MRC has had an increasing interest in research collaboration with China, in particular in the area of emerging infections and vaccine research. This has led to the setting up of a project to assess current principles and mechanisms of medical research ethics review in China. The China UK Research Ethics project (CURE) aims to describe the frameworks of ethics as applied to medical research in China and the UK, and to highlight similarities and differences between these frameworks. The project will also look at the systems available for review of medical research ethics in specific environments in the two countries and highlight similarities and differences. The steering group, chaired by Professor David Warrell, Emeritus Professor of Tropical Medicine at the University of Oxford, will make recommendations on how future collaborations with Chinese research institutions should be assessed in terms of ethics review and governance.

The final report of the EU-funded project Networking for Ethics on Biomedical Research in Africa (NEBRA), of which the MRC was a partner, was published in November 2006. The report provided a detailed analysis of the current situation in 15 West African countries, and highlighted some of the difficulties in carrying out a survey of

Research Ethics Committees (RECs) across the sub-region. A number of health authorities in the region are using NEBRA's recommendations and seeking to change practice. They have already begun to develop national initiatives to strengthen ethical review of research; for example, in Senegal, in Burkina Faso and in Benin where the Ministers of Health have expressed their commitment to this initiative. Follow-up activities involve capacity strengthening, support of RECs and dissemination of information and educational material.

Research integrity

The MRC has been working with the other research councils and with the newly-established UK Research Integrity Office (UKRIO) to strengthen its accountability for the conduct of the research it supports in universities and other research organisations. The aim of UKRIO is to provide a service that supports research integrity to the health and biomedical sciences research community.

Research involving animals

There are some medical research questions that can be answered only by using animals. However, in accordance with the law, scientists avoid using animals whenever possible. When applying for funding for studies involving animals, researchers must give sound scientific reasons for using them and explain why there are no realistic alternatives. Around 30 per cent of the research the MRC funds involves animals, and we are committed to ensuring that these programmes follow high standards of animal welfare.

As part of our commitment to animal welfare, the MRC plays an active role in developing and disseminating the principles of the 3Rs: **replacement** of animals with humane alternatives whenever possible; **reduction** in the numbers of animals used; and **refinement** of husbandry and procedures to minimise any pain and suffering and to improve welfare.

One way in which the MRC achieves this is as the main funder (60 per cent) of the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs). The MRC's funding of the centre more than doubled to reach £1.4m in 2006/07. The centre promotes the advancement of the 3Rs, bringing together stakeholders in academia, industry, the Government, regulatory authorities and animal welfare organisations. The NC3Rs published its second annual report in January 2007 (www.nc3r.org.uk).

Highlights from 2006 include:

- A higher profile for the NC3Rs, in terms of grant applications, meeting attendees, and visitors to its website.
- Increased investment in high-quality 3Rs research: the centre awarded £1.4m of grants in 2006, among its other investments.
- Publication of guidelines on primate accommodation, care and use.
- Securing agreement from regulators to review the International Conference on Harmonisation guidelines on conventional acute toxicity testing, with the aim of reducing the numbers of animals required.
- Increased funding from industry.

During 2006/07, the MRC published guidelines on minimising the breeding of an avoidable surplus of rodents. We are also working with the Royal Society for the Prevention of Cruelty to Animals (RSPCA) on a project to encourage the archiving and sharing of genetically-altered mice for use in research to study disease. The MRC continues to work with a range of organisations interested in animal welfare, through the Boyd Group – a UK-based forum for open exchange of views on issues of concern related to the use of animals in science.

During the summer, the MRC responded to an expert questionnaire from the European Food Safety Authority (EFSA) on the implications of possible changes in the EU Directive on the use of animals in research (86/609/EEC). The Commission expects to publish a draft text during 2007.

The MRC, along with the Academy of Medical Sciences, the Royal Society and the Wellcome Trust, sponsored an independent study group to examine the use of non-human primates in medical research. The group, chaired by Sir David Weatherall, concluded that there is a scientific case for careful, meticulously regulated non-human primate research, provided that it is the only way of solving important questions and high standards of welfare are maintained. The MRC will be taking forward relevant recommendations from the report (available at www.mrc.ac.uk).

Regulatory Support Centre for research involving people

The Regulatory Support Centre (RSC) has been in operation since early 2006. Its purpose is to support the MRC and the wider UK research community in implementing the legislation and guidance that governs the involvement of people in research.

The focus for the first year has been to support translational research, in particular experimental medicine, by making regulation and good practice requirements more accessible.

Two current projects, both of which are near completion, are the production of web-based 'toolkits' – colour-coded route maps that provide an overview of requirements and guidance illustrated with practical examples of good practice:

- Data and Tissues Toolkit, covering good practice in consent procedures and data confidentiality, and the requirements of new human tissue legislation.
- A similar approach for experimental medicine studies; in particular, the subset that do not fall within current regulation – to identify and share good practice, demonstrating practical ways to minimise any risks in this research.

The RSC is also helping MRC unit staff and grant-holders to learn to identify, develop and deliver required areas of training with respect to regulation and ethics review. Collaboration with other UK Clinical Research Collaboration (UKCRC) partners is taking place to exploit opportunities for the development of joint training programmes for diverse communities (researchers, ethics committee members, the public and regulators).

In conjunction with UK Clinical Research Network, the RSC has coordinated the establishment of the UKCRC Regulatory and Governance Advice Service, which includes the involvement of a network of regulators and governance bodies. The service supports local advisors in NHS and university research management to provide authoritative and consistent advice to researchers. This has been successfully piloted and is currently being rolled out UK-wide.

Open access publishing

The MRC is a champion of 'open access' publishing in science. The aim of this is to make high-quality peer reviewed publications freely available to a wider audience, to help support and advance biomedical research worldwide.

This takes two forms; firstly, authors may pay publication costs and retain copyright when their papers are published, rather than the copyright being transferred to the scientific journal, and, secondly, published papers are deposited in a freely accessible repository. This means that the papers are available online without the need for journal subscriptions, and access to papers is free of charge.

In 2006/07, the MRC introduced its open access policy, which is mandatory for all grant-holders whose proposals were submitted after 1 October 2006, and for all MRC establishments for papers submitted for publication after 1 June 2007. The policy applies whether a paper is wholly or partially funded by MRC, and mandates that electronic copies of papers are freely available from PubMed Central (PMC) and other PMC international repositories such as UK PubMed Central (UKPMC) within six months of publication.

UKPMC is a UK-based free digital archive of biomedical and life sciences journal literature, which will provide a stable, permanent, and free-to-access online digital archive of full-text, peer-reviewed research publications, and later also to include datasets.

This initiative is being guided and funded by the UKPMC Funders Group, which is a mix of governmental and charitable research funders in the UK, including the MRC and the Wellcome Trust. The group is funding the setting-up, maintenance and ongoing development of UKPMC. The initial system went live in January 2007, with work in progress on further development such as a reporting tool and an enhanced search engine.

Enabling further research use of MRC-funded data

Every year, the MRC invests around £500 million of public money in research, a primary output of which is data. The MRC wants to make better use of the longer-term research opportunities that such a diversity and quantity of data provides. One of the best ways of achieving this is to ensure that data are properly curated and readily accessible for further high-quality, ethical research.

The MRC's data-sharing policy promotes new and extended use of MRC-funded data beyond the originating research teams. The policy principles are consistent with those of other research funding bodies, balance the interests of those creating the data and other users, and recognise the ethical and regulatory responsibilities for data from research involving people.

Since the policy was introduced in 2006, the MRC's data sharing and preservation initiative has involved the development of practical guidance and piloting solutions in areas where the MRC's Council, research boards and the research community have identified a need. These include:

- Advice to researchers on how to plan, cost and carry out data preservation for sharing and re-use.
- Principles on research access to MRC-funded data supported by guidance on practical issues such as dataset discovery, governing and funding access, and data-sharing agreements.
- Study-specific projects within population-based research to evaluate and implement options for enhancing data preservation for wider access and research use.

A high-level strategic plan is now being implemented for progressing from current work streams towards a longer-term vision for MRC that will establish sustained support for:

- Discovery of research datasets along with the information required for informed re-use.
- Managed access to, and use of, data for high-quality, ethical secondary research.
- Curation of data to enable its informed re-use beyond the originators.
- Long-term preservation of selected MRC-funded datasets.
- Development of tools, standards, guidance and services to support these activities.

The MRC has committed around £1 million over the next two years to create a data support service to deliver practical solutions in priority areas, demonstrate benefits and evaluate costs, and thereby develop a costed business case for the longer term. The coming year will focus on establishing a partnership that can provide a visible and valued professional advice and support service to meet the data curation needs of the MRC research community.

Effective business practice

The MRC continually aims to improve operational effectiveness and performance management to ensure that the science funded by the MRC is supported effectively and appropriate mechanisms are in place to support the ethical, regulatory and statutory framework.

Administrative efficiency

The MRC has implemented substantial plans for restructuring its administration, both in Head Office and in institutes and units, in response to the Gershon report of 2005 on the delivery of government services. This was consistent with plans already made for reducing the number of Head Office staff, as part of the submission to the Lyons inquiry.

The main element of these plans has been the creation of a Shared Service Centre (SSC) in Swindon. This was commissioned during 2006/07 and now provides procurement, and transactional finance and human resources services for all MRC establishments. The centre has led both to savings in posts, and to the transfer of posts out of the South East. It has also contributed to achieving efficiency savings targets set by the Government, which the MRC exceeded in 2006/07. The MRC will continue to make efficiency savings in line with government targets.

The MRC is also working with the other research councils on a broader, cross-research council administrative strategy that will see delivery of shared corporate support services across all councils by 2009.

In response to the Director General of Science and Innovation's request, a 'roadmap' was produced in 2006 presenting the research councils' plans for establishing a cross-council SSC. A central project team has been established, with a full business case now in preparation and due in August 2007. The Research Councils UK (RCUK) SSC, like the MRC SSC, will focus on highly transactional activities, with a broader scope which encompasses grants processing (including studentships and fellowships) and IT support for headquarters. Having moved to its own SSC set-up during 2006/07, the MRC is in a strong position to provide positive support for the development of the new centre.

Management of the Medical Research Foundation

At the beginning of the year, new trustees assumed responsibility for the MRC's charity – the Medical Research Foundation. In appointing independent trustees, the MRC's Council made clear its commitment to independent governance of the charity. The new trustees set a medium-term modernisation agenda aimed at increasing commitment to research within the remit of the MRC.

Information systems

LogicaCMG provides services to the MRC on the basis that the company is rewarded when there are tangible business benefits, such as improved communication or reporting, from the relationship. Throughout the year, the partnership, which is called Auris, has continued to operate and support the MRC's corporate information needs primarily through the SAP enterprise resource planning system software.

The service availability targets set for LogicaCMG to achieve have all been exceeded during the year. As it is now three years since targets of delivery of tangible business benefits to the MRC were originally defined, a review of these targets is now underway in order to realign them to current business needs.

Through the partnership with LogicaCMG, a number of new services were introduced during the year. As part of the implementation of the corporate communications strategy, the MRC's website was fundamentally redesigned and re-launched to enable easier navigation and access to information. Initial feedback from users is positive.

The implementation of the SAP enterprise resource planning system was extended to include electronic procurement of goods and services from every MRC establishment. In parallel, the SSC was fully equipped to handle all the transactions generated by the SAP suite and the human resources system. A project to replace the human resources and payroll system was launched during the year; phase one of this system is due to go live in July 2007. A second phase of this project, to introduce employee self service, is currently being planned.

The MRC completed the prototyping of a Research Data Warehouse which brings together all our extramural and intramural science data and all the relevant financial information. This prototype is now being turned into a full production system and will be available for use at the end of July 2007.

Audit

In addition to fulfilling its remit with respect to issues of corporate governance, the audit committee:

- Approved the rolling programme of compliance and systems audits performed by the Research Council's Internal Audit Service (RCIAS) and renewed the audit reports.
- Oversaw the continuing use of the Directors' Annual Statement of Internal Control (DASIC) across MRC units and institutes.

- Monitored major projects and reviewed reports from the MRC's management.
- Continues to monitor the risk-management practices within the MRC, in line with requirements of the Treasury.

Risk management

As a non-departmental public body, the MRC is required to set a policy and framework for the management of risk so that the Chief Executive and Accounting Officer can give assurance on the systems of internal control that support the achievement of the MRC's objectives. There has been a strong emphasis on risk management during 2006/07. During the year, we sought to develop our ability to handle risk and improve risk management processes.

Enhancements include:

- Appointment of a qualified Risk Manager.
- Full revision of the risk management policy.
- Development and approval of a standard operating procedure for risk management.

The statement on internal control (see page 56) gives more details on risk management within the MRC.

Environmental policy

The MRC is committed to continuous improvement of its environmental performance. Each unit is required to develop its own environmental policy, based on the MRC's central policy but adapted according to its local circumstances, and to report progress regularly.

As part of its work to achieve optimum environmental performance, the MRC continues to educate, train and motivate its staff and contractors to work in an environmentally responsible way and to play a full part in developing new initiatives. We also aim to cooperate with other bodies in the public and private sectors to develop and promote environmentally responsible practices.

The MRC actively encourages units to make continuing efforts to address the need to reduce any possible negative impact of MRC premises on the environment, by reducing the consumption of power wherever possible. These include 'turn off' policies – which advocate turning off lights and other electrical equipment, including laboratory equipment, when not in use, especially after hours – and by using modern laboratory design methods in new premises. The projects planned during the next five years to design very large buildings to re-house the National Institute for Medical Research (NIMR) in London and the Laboratory of Molecular Biology (LMB) in Cambridge will pay particular attention to the likely environmental impact of the premises.

The Estates Management Section maintains a site on the MRC portal and publishes environmental information to assist and update MRC units and staff. The MRC's Council is due to review progress in meeting the MRC's environmental management strategy at its meeting in July 2007.

Health, safety and security

The MRC is continuing its programme to develop plans to prepare for the threat of a pandemic influenza outbreak. As part of this programme, we have identified important activities and organisation networks that must remain active during a crisis. The MRC has also worked on its general Business Continuity Strategy, which covers contingency plans to maintain the organisation's activities, including its research programmes, in the case of disruptions or crises. This is in line with the risk management initiative.

Each of the MRC's research units has a unit safety coordinator (USC). This is usually a part-time role, except in larger units and institutions. The MRC has continued its professional development programme which aims to ensure that the role of the USC reflects the business needs of the unit. In conjunction with the Institute of Safety in Technology and Research, based at the University of Birmingham, the MRC's Health and Safety section is leading a working party to establish a national standard framework for biological safety officer competencies.

The MRC's overall accident rate remains at a level comparable to the academic research community. For the calendar year 2006, 2.57 per 1,000 MRC employees lost over three days due to accidents at work.

Scientific misconduct

There was one allegation of scientific misconduct during 2006/07. The allegation was not upheld.

Register of declared interests

Like others who serve the public, individuals working with the MRC follow the Seven Principles of Public Life as set out by the Committee on Standards in Public Life. Members of the MRC Council, boards and subcommittees are required to declare any private, professional or commercial interests that might, or might be perceived to, conflict with the MRC's interests.

A register of declared interests for the MRC's Council and board members is published on the MRC website at www.mrc.ac.uk.

Freedom of Information

The MRC provides information to the public on how we conduct our business in terms of how we carry out our duties, how we make decisions and how we spend public money. The MRC publication scheme, which is published on our website and available in hard copy on request, outlines the information available to the public and acts as a guide to how that information can be obtained. We aim to make information about the MRC freely available unless, in line with relevant exemptions under the Freedom of Information Act, there is a good reason not to do so.

During 2006/07, we received 36 requests under the Freedom of Information Act (2005). As shown in Table 4, in over 50 per cent of cases we were able to provide the information request in full. We answered 94 per cent of requests within 20 working days.

Table 4: Freedom of Information requests

Type of request	Number
Funding applications	16
Outputs	2
Research policy and outputs	6
Business policy and operations	8
Personal information	3
Contracts	1



Management Commentary

The MRC's business and priorities

The MRC is the only public funding agency in the UK that covers the whole spectrum of medical research, from basic and translational research to the application of new treatments. The MRC receives a grant from Parliament, through the Office of Science and Innovation (OSI)¹, but is independent in its choice of which research to support.

Our strategic aims and research priorities have been developed in consultation with the UK Health Departments, the other research councils, industry and other stakeholders. They seek to identify and respond to health need, to meet the objectives set out in the 2004 Government Spending Review (SR2004), which agreed funding allocations for 2006/07 and 2007/08, and to contribute to the OSI Public Service Agreement targets. These targets are i) improving the international performance of the UK's science and engineering base and ii) exploitation of the UK science base and the innovation performance of the UK economy.

During 2006/07 the MRC submitted contributions to the Treasury review of UK health research led by Sir David Cooksey. During the coming year it will be working with the newly established Office for Strategic Coordination of Health Research (OSCHR) and the National Institute for Health (NIHR) in England and the Health Departments in Northern Ireland, Scotland and Wales to develop the single health research strategy envisaged by the review, and in particular to help deliver the translation agenda.

At the end of 2006, the MRC initiated a joint review, with Ernst & Young, to assess the MRC's role, structures and operations. One of the aims of the review was specifically to assess current perceptions of translation and the MRC's role in its delivery. The MRC's Council considered the report from the joint review team at its meeting in March 2007 and agreed that the report would be published, alongside information on implementation, later in the year.

The final Comprehensive Spending Review (CSR2007) settlement and the MRC's Delivery Plan for the period will be finalised in autumn 2007. However, the MRC's research funding priorities for the coming year, 2007/08, have been broadly identified and published through the Delivery Plan for 2007/08; these build on the 2006/07 Delivery Plan and subsequent developments. In developing future strategy and priorities, the MRC has been working, throughout 2006/07, with the other research councils and with OSCHR to develop submissions to CSR2007.

The year 2006/07 was the second year of operation of the research councils' Performance Management System, which enables OSI to determine the contribution that each research council is making towards achieving government targets. There are three key elements that enable OSI to hold the research councils to account. The annual Delivery Plan, the current version of which is published on the MRC website, sets out how the MRC will contribute towards meeting government targets for the science base, and how it will fulfil its own strategic objectives. The Scorecard enables OSI to track the MRC's progress against its organisational milestones on a quarterly basis. The Outputs Framework is a set of metrics, for which data were published for the first time in June 2006, on achievements in 2005/06.

The Subcommittee on Evaluation, a subcommittee of the MRC's Council, is overseeing the establishment of a programme of evaluation activities which will enable the Council and other stakeholders to judge the MRC's performance against its strategic objectives. A number of projects have been launched during the year. These include a joint initiative with the Wellcome Trust and the Academy of Medical Sciences that aims to quantify the economic return to the UK of investment in UK medical research, and a cross-research council study of the economic impacts of research council-funded science. The MRC is also undertaking a pilot study to develop and assess effective metrics to monitor achievements quantitatively against performance objectives. Following the outcome of the MRC/Ernst & Young internal review, we intend to work more on evaluation, working more closely with the Department of Health and other stakeholders.

Management Commentary continued on page 47...

¹ The Department for Innovation Universities and Skills (DIUS) was established in June 2007 following the dissolution of the Department of Trade and Industry. The new Department brings together the science and innovation responsibilities from the DTI, and skills, further and higher education from the Department for Education and Skills.

Table 5: Summary of the financial return for 2006/07

Resource	Financial year	2006/07	2005/06	2004/05
		£000's	£000's	£000's
<i>External income</i>		74,328	67,161	53,430
Pay and operating costs		271,668	253,192	223,503
Depreciation		18,964	17,274	16,954
Cost of capital		6,600	6,899	6,599
Provision movement		(182)	7,940	4,048
Research grants		243,711	195,464	171,489
Capital grants to private sector ¹		-	29,877	16,505
International subscriptions		11,305	9,884	8,828
(Gain)/loss on disposal of fixed assets		(780)	5,262	-
<i>Total expenditure</i>		551,286	525,792	447,926
<i>Net income and expenditure</i>		476,958	458,631	394,496
DEL		418,720	444,236	427,105
Underspend (overspend)		(58,238)	(14,395)	32,609
Underspend (overspend) brought forward		57,190	70,518	37,909
Adjustment to brought forward ¹		(656)	1,067	-
<i>Underspend (overspend) carried forward – near cash and non-cash</i>		(1,704)	57,190	70,518
of which:				
Near cash		(4,553)	55,835	50,830
Non-cash		2,849	1,355	19,688
Capital	Financial year	2006/07	2005/06	2004/05
		£000's	£000's	£000's
Direct Capital		51,187	41,785	28,437
Capital grants to the private sector ¹		20,451	-	-
<i>Total Capital expenditure</i>		71,638	41,785	28,437
Capital DEL		85,071	36,573	28,034
Underspend (overspend)		13,433	(5,212)	(403)
Underspend/(overspend) brought forward		1,459	4,902	5,305
Adjustment to brought forward ¹		(1,459)	1,769	-
<i>Underspend (overspend) carried forward</i>		13,433	1,459	4,902
Commercial fund	Financial year	2006/07	2005/06	2004/05
		£000's	£000's	£000's
Investments		2,038	7,271	5,990
Debtors		11,943	12,952	12,956
Cash		198,911	147,567	41,552
Less creditors		(15,115)	(5,935)	(3,819)
<i>Net tangible assets</i>		197,777	161,855	56,679
Intangible assets		87,313	79,137	110,255
<i>Net assets</i>		285,090	240,992	166,934

¹ Classification change agreed with OSI.

Financial Results

A summary of the MRC's financial results for 2006/07 and the preceding two years is shown in the table below. Table 5 shows our results using the accounting conventions required for reporting to central government. This form of accounting differs in a number of significant ways from that required for our formal audited accounts. A reconciliation between the two sets of accounts is shown at Table 6.

Each year we receive a budgetary allocation from OSI in the form of a Departmental Expenditure Limit (DEL)¹. The DEL is split into a number of categories and rules exist which place certain restrictions on the use of each type. The main subdivision is between Resource DEL and Capital DEL. Resource DEL is further divided into Near Cash DEL and Non-Cash DEL; Near Cash DEL can be used for Non-cash and Capital Expenditure, but other types of DEL cannot be used for Near Cash Resource Expenditure. In any one year we normally expect to spend our DEL allocation. However, some flexibility is allowed in practice in the form of a carry forward of previous years' underspends. These underspends can be called upon to supplement our annual DEL through End of Year Flexibility (EYF), subject to agreement by OSI and the Treasury in any given year. The Commercial Fund was brought into DEL framework post balance sheet date and the MRC was instructed to repay £92m to the Government's Consolidated Fund. Note 29 in the Annual Accounts refers. The MRC has been informed that the remaining balance of £106.9m has been added to its stock of EYF. Drawdown of this EYF will be subject to the normal processes including approval from DIUS. The MRC have earmarked a large proportion of the Commercial Fund EYF as a contribution towards the costs of rebuilding the Laboratory of Molecular Biology in Cambridge, and the National Institute for Medical Research in London. The MRC remains committed to both building programmes and is still in discussion with DIUS over the implications of this change.

Review of the year

The MRC is required by the Department of Trade and Industry (DTI) and the OSI to control its budgets within a Departmental Expenditure Limit (DEL) under the Resource Accounting and Budgeting regime.

In 2006/07 we incurred £477m of Resource expenditure. This was £58.2m more than our Resource DEL for the year of £418.7m, reducing our carried forward Resource underspend from £57.2m to an overspend of £1.7m. Capital Expenditure charged to DEL at £71.6m was £13.4m less than our Capital DEL of £85.1m. This £13.4m is earmarked for a major capital project in 2007/08.

In 2006/07, we increased our Resource expenditure by four per cent compared with the previous year, and increased external grant payments (including capital grants) by 17 per cent. In addition, substantially more money has also been committed to new grants. The value of new awards to universities rose from £170m in 2004/05 to £194m in 2005/06 and to £209m in 2006/07. Over this period, we have also been able to maintain our support for scientists' training and for our own units and institutes.

Excluding intangibles, the Commercial Fund balance increased significantly to £198m during 2006/07, due to royalty income and disposal of shares in Cambridge Antibody Technology and Domantis. The intangible assets represent the present value of these future royalties.

As part of an overall reduction in the science budget to assist other parts of DTI, the MRC's brought forward underspend in 2007/08 has been reduced by £10.7m. However, the operating budget set for 2007/08 represents an increase of £3.6m compared to 2006/07.

Accounting for income and grant-in-aid

Following a change in the accounting rules for non-departmental public bodies, our accounts now contain a net expenditure statement instead of an income and expenditure statement. Expenditure and external income is recognised on an accruals basis (i.e. when the recipient has fulfilled its obligations, such as carried out a period of research). The main change is that grant-in-aid income and external income of a collaborative nature is credited to reserves, to better reflect the financing of our activities.

The balance sheet at 31 March 2007 shows provisions for liabilities and charges of £16.6m. This reflects the inclusion of liabilities falling due in future years which, to the extent that they are not to be met from the MRC's other sources of income, may only be met by future grant-in-aid from DTI, the MRC's sponsoring department. This is because, under the normal conventions applying to parliamentary control over income and expenditure, such grants may not be issued in advance of need.

Grant-in-aid for 2006/07, taking into account the amounts required to meet the MRC's liabilities falling due in that year, has already been included in the department's estimates for that year, which have been approved by Parliament.

The figures shown in the financial summary tables are those after adjusting for the differences between statutory presentation and those scoring under the PES. Table 6 shows the reconciliation of the finance tables to the Annual Account.

¹ Departmental Expenditure Limited (DEL) is the primary control in resource accounting and budgeting.

Table 6: Reconciliation of finance tables to the annual account

<i>External income</i>	<i>Notes</i>	<i>£000's</i>
Contributions from other government departments	3	32,477
Contributions and grants from other bodies	4	35,913
Other income	5	5,711
Interest receivable	6	8,642
Amount payable to OSI	14	(201)
Less Commercial Fund interest	6	(8,214)
External Income per finance table		74,328
<i>Pay and operating costs</i>		
Annual Account		
Staff costs	7	164,581
Less FRS17 current service costs		(4,319)
Less increase in provision	21	(3,846)
Plus release of provision	21	4,032
Plus transfer of provision to accruals	21	239
Other operating costs	8	111,079
	Net expenditure statement	
Less contribution for licence fees		(98)
Pay and operating costs per finance table		271,668
<i>Depreciation</i>		
	Net expenditure statement	
Depreciation per Annual Account		19,079
Less release from donated asset reserve	22	(115)
Depreciation per finance table		18,964
<i>Cost of Capital</i>		
	Net expenditure statement	
Cost of Capital		16,097
less adjustment for Commercial Fund		(9,497)
Cost of Capital per finance table		6,600
<i>Provision movement</i>		
Amount provided in year	21	3,846
Less amount expended in year per Annual Account	21	(4,032)
Less transfer to accruals per Annual Account	21	(239)
Unwinding of the discount	21	243
Provision Movement per finance table		(182)
<i>Research grants</i>		
Annual Account		
Research grants	9	175,938
Less capital grants to private sector		(20,451)
Other research	10	36,048
Postgraduate training awards	11	52,176
Research grants per finance table		243,711
<i>International subscriptions</i>		
International subscriptions per Annual Account	12	11,305
International subscriptions per finance table		11,305

Capital expenditure

Direct Capital

Fixed asset additions per Annual Account	16	51,452
Less donated asset	22	(215)
Less net book value of disposals	16	(50)

Direct Capital per finance table	51,187
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Capital grants to private sector

Capital grants included in research grants	20,451
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Capital grants to private sector per finance table	20,451
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Remuneration Report 2006/07

Remuneration Subcommittee

The salaries of the directors of MRC units and institutes, institute divisional heads and Head Office group directors are reviewed by the MRC Council Remuneration Subcommittee. The membership during 2006/07 was:

Professor Colin Blakemore (CEO, MRC)

Professor Alan North¹ (MRC Council member and Chairman of the Neurosciences and Mental Health Board)

Dr Peter Fellner (MRC Council member)

Mr Nick Winterton (MRC Executive Director), by invitation for staff other than Head Office.

Remuneration policy

No formal pay scale exists for MRC's senior staff (Band 1) beyond a stated minimum pay point set at £55,000 (2006/07 rate). Band 1 pay is based on the concept of 'personal pay' and is reviewed annually by the Remuneration Subcommittee.

In determining appropriate pay levels for Band 1 staff, the Remuneration Subcommittee pays reference to annual appraisal against annual or 3–5 year objectives; the scientific (or other) performance of a unit or group; the breadth of Band 1 responsibilities as reflected in staffing, budgetary and other resource management issues; contributions to the delivery of wider corporate objectives (for example, in areas of ethics, corporate governance, public communication, strategic partnerships); and external market data. Market data are used to inform the competitiveness of remuneration packages in order to secure or retain world class scientists as a corporate and national asset.

All Band 1 remuneration is subject to a minimum acceptable level of performance. Pay adjustments are informed by both the general pay award rate and the provisions of the Additional Salary Reward scheme, which allows for a maximum 10 per cent annual increase in salary, paid either as a one-off bonus or consolidated base-pay component, for exceptional employee contributions.

Band 1 scientific staff are appointed on open-ended contracts until normal retirement age, subject to quinquennial (five-yearly) review in accordance with the MRC's scientific peer review system. Notice periods in the event of redundancy are a minimum of six months. Termination payments are in accordance with MRC's Early Severance and Compensation Scheme.

Senior staff remuneration

The following section provides details of the remuneration and pension interests of the Chief Executive, the Executive Board and Council members.

Chief Executive

The performance management and remuneration arrangements for the Chief Executive are established and managed by the MRC's sponsor department, the Department of Trade and Industry, through the Office of Science and Innovation². In summary, research council chief executives are paid both a basic salary and performance pay comprising an annual and an appointment term bonus. The basic salaries are derived from three pay bands, which reflect the differing sizes and responsibilities of the research councils. Each band has four increments and, subject to at least satisfactory performance, Chief Executives receive an increment each year until they reach the top of the scale. In addition it is practice that all amounts are revalorised in line with the Senior Civil Service.

At the beginning of each year, the Director General Science and Innovation (DGSI) and the relevant Council Chair agree with the Chief Executive a set of annual performance objectives for the year. In addition a set of appointment term objectives are agreed early in the appointment and are reviewed annually. At the end of the year the Chief Executive, chair and an independent Council Member write an assessment of performance over the year, and the DGSI, with advice from colleagues, agrees an OSI assessment of overall performance and specific achievements against objectives for annual and appointment term objectives.

A Remuneration Committee comprising the DGSI, the chairs of all the research councils and two independent members, then meets to review Chief Executives' performance and agree pay recommendations, taking into account the assessments and any comments in the papers. These recommendations are subject to ratification by the Permanent Secretary of the DTI.

¹ Appointment ended 31 July 2006.

² The Department for Innovation Universities and Skills (DIUS) was established in June 2007 following the dissolution of the Department of Trade and Industry. The new Department brings together the science and innovation responsibilities from the DTI, and skills, further and higher education from the Department for Education and Skills.

The appointment term bonus is assessed each year and the amounts agreed are retained and are then paid out at the end of the appointment term. If the Chief Executive leaves early the Remuneration Committee may recommend a reduced bonus be paid depending on the circumstances.

The Chief Executive is an ordinary member of the MRC's pension scheme. Entitlements under conditions of service are the same as those for other members of staff and, should their contract be terminated early, they would be entitled to compensation under the terms of the MRC early retirement and severance compensation scheme. Professor Blakemore's fixed-term appointment expires on 30 September 2007.

	Chief Executive	Executive Director	Director of Research Management Group	Director of Corporate Affairs Group	Director of Human Resources Group	Director of Finance Group
	Professor C Blakemore	Mr N H Winterton	Dr D R Dunstan	Mrs J M Lee	Dr F Green ¹	Mr N W R Watts
Age	62	59	63	58	44	48
Salary, including performance related pay, from 1 April 2006 to 31 March 2007	£141,602	£118,910	£114,908	£92,837	£86,415	£96,014
Salary, including performance related pay, from 1 April 2005 to 31 March 2006	£142,894	£115,484	£111,598	£89,837	£30,294	£88,995
Real increase in pension at age 60 ²	£0-5,000	£0-5,000	£0-5,000	£0-5,000	£0-5,000	£0-5,000
Total accrued pension at age 60 at 31 March 2007 ³	£0-5,000	£50,001-55,000	£40,001-45,000	£35,001-40,000	£20,001-25,000	£0-5,000
Cash equivalent transfer value at 1 April 2006	£49,000	£841,000	£638,000	£596,000	£213,000	£22,000
Cash equivalent transfer value at 31 March 2007	£71,282	£902,414	£714,366	£646,860	£282,438	£37,433
Real increase in cash equivalent transfer value	£22,282	£61,414	£76,366	£50,860	£69,438	£15,433

¹ Dr Green has undertaken the role of HR Director since 17 October 2005 and was confirmed in this role on 17 January 2006, salary disclosed for 2005/06 relates to the period 17 October 2005 to 31 March 2006.

² Or at retirement age.

³ Details of the MRC Pension Scheme appear in note 7(d) of the Annual Account.

Salary including performance related pay

Salary, including performance-related pay, covers both pensionable and non-pensionable amounts and includes gross salaries, performance pay or bonuses and allowances. It does not include amounts which are reimbursement of expenses directly incurred in the performance of an individual's duties.

Cash Equivalent Transfer Values

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme.

A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. They also include any additional pension benefit accrued to the member as a result of their purchasing additional years of pension service in the scheme at their own cost. CETVs are calculated within the guidelines and framework prescribed by the Institute and Faculty of Actuaries.

Real increase in Cash Equivalent Transfer Values

This reflects the increase in the CETV and takes account of the increase in accrued pension, contributions paid by the employer and contributions paid by the employee, which includes the voluntary purchase of additional years of pensionable service and the value of any benefits transferred from another pension scheme or arrangement.

Conflict of interest

Senior staff are required under the staff Code of Conduct to declare details of any company directorships and other significant interests which may conflict with their management responsibilities. No declarations have been made in the year.

MRC's Council members

Council members are appointed by the Science Minister, in accordance with the code of practice of the Office of the Commissioner for Public Appointments. The normal period of appointment is four years, and members may be re-appointed for one further four-year term.

The positions of Council members are non-pensionable and there is no entitlement to compensation for loss of office. Sir John Chisholm's fixed term appointment as Chairman will end on 30 September 2010. Emolument comprises an honorarium, set annually by OSI; enhanced honoraria are paid to some members such as board and Audit Committee chairs to reflect additional responsibilities. Details of amounts paid to each member during the year were:

Name		Emolument ¹
Sir John Chisholm	Chairman (appointed 1 October 2006)	£0
Sir Anthony Cleaver	Chairman (appointment ended 30 September 2006)	£7,550
Professor David Armstrong	King's College London	£8,455
Mr Michael Brooks	Financial Management Consultant	£7,758
Professor Kay Davies	University of Oxford	£6,345
Professor Carol Dezateux	University College London	£6,345
Mr Derek Flint	Non-Executive Director of Alliance and Leicester Insurance plc (appointment ended 31 July 2006)	£2,790
Dr Peter Fellner	Vernalis, Plc	£6,345
Professor Christopher Kennard	Imperial College London (appointed 1 August 2006)	£5,565
Professor Andrew McMichael	University of Oxford	£8,455
Dr Lefkos Middleton	GlaxoSmithKline	£0
Professor Alan North	University of Manchester (appointment ended 31 July 2006)	£2,790
Professor Geneva Richardson	King's College London	£6,345
Professor John Savill	University of Edinburgh	£8,455
Professor Herb Sewell	University of Nottingham	£6,345
Professor Michael Wakelam	The Babraham Institute (formerly University of Birmingham to 31 Jan 2007)	£8,455

¹ Sir John Chisholm and Dr Lefkos Middleton have chosen not to draw their honorarium.

The following *ex officio* members did not receive an honorarium:

Dr Harry Burns (Scottish Executive Health Department)

Dr Michael McBride (Northern Ireland Department of Health, Social Services and Public Safety)

Professor Sally Davies (Department of Health)

Mr John Neilson (observer, Office of Science and Innovation)

Like others who serve the public, individuals working with the MRC follow the Seven Principles of Public Life as set out by the Committee on Standards in Public Life. Members of the MRC Council, boards and subcommittees are required to declare any private, professional or commercial interests that might, or might be perceived to, conflict with the MRC's interests. A register of declared interests for the MRC's Council and board members is published on the MRC website.



Sir Leszek Borysiewicz (appointed 1 October 2007)

Chief Executive and Accounting Officer

Date: 14 December 2007



Annual Accounts 2006/07

Details of current activities are to be found in the Annual Report.

Financial results for the year

- The statement of net expenditure records a net expenditure of £540.9m.
- The parliamentary grant-in-aid totalled £503.5m.
- Total operating income amounted to £39.8m, staff costs were £164.6m, other operating costs excluding depreciation totalled £111.1m and expenditure on research grants totalled £175.9m.
- Total asset values increased by £100.2m, while creditors increased by £37.6m.
- Reserves, excluding the general reserve, showed a net increase of £61.1m.
- General reserves increased by £56.3m.
- Total government funds at 31 March 2007 stood at £623.9m (Note 22).
- Amounts payable to the Consolidated Fund during the year were £0.2m (2005/06 = £0.3m). (Note 14.)

Creditor payment policy

The MRC observes the Confederation of British Industry's Code of Practice. It adheres to the principles of the Prompt Payers Code and makes every effort to comply with the agreed terms of payment of creditors' invoices, endeavouring to settle invoices within 30 days of receiving them or earlier if supplier terms dictate. In 2006/07 the MRC paid 77 per cent (2005/06 = 91 per cent) of invoices within supplier terms. The Prompt Payers Code can be found at www.payontime.co.uk.

Audit Committee

An MRC Audit Committee, chaired by Mr Michael Brooks (MRC Council member), meets four times a year to review internal and external audit matters and the MRC's accounts.

Auditors

The MRC's accounts are audited by the Comptroller and Auditor General under the terms of paragraph 3(3) of Schedule 1 of the Science and Technology Act 1965. The audit fee for 2006/07 was £61k.

So far as the Accounting Officer is aware, there is no relevant audit information of which the MRC's auditors are unaware. The Accounting Officer has taken all the steps that he ought to have taken to make himself aware of any relevant audit information and to establish that the MRC's auditors are aware of that information.

Statement of the Council's and Chief Executive's responsibilities with respect to the financial statements

Under paragraph 3 of Schedule 1 to the Science and Technology Act 1965, the Secretary of State for Trade and Industry¹, with the consent of the Treasury, has directed the Medical Research Council (MRC) to prepare for each financial year a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of the MRC and its statement of net expenditure, recognised gains and losses and cash flows for the financial year.

In preparing the accounts, the Accounting Officer is required to comply with the requirements of the *Government Financial Reporting Manual* and, in particular, to:

- Observe the Accounts Direction issued by the Secretary of State for Trade and Industry, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis.
- Make judgements and estimates on a reasonable basis.
- State whether applicable accounting standards as set out in the *Government Financial Reporting Manual* have been followed and disclose and explain any material departures in the financial statements.
- Prepare the financial statements on a going concern basis.

The Secretary of State for Trade and Industry has appointed the Chief Executive as Accounting Officer of the MRC. The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding the MRC's assets, are set out in the Accounting Officers' Memorandum, issued by HM Treasury and published in *Government Accounting*.

Statement on internal control 2006/07

1. Scope of responsibility

As Accounting Officer and Chief Executive, I have responsibility for maintaining a sound system of internal control that supports the achievement of MRC policies, aims and objectives, while safeguarding the public funds and departmental assets for which I am personally responsible, in accordance with the responsibility assigned to me in *Government Accounting*.

The MRC has three bodies to support it in discharging its responsibilities relating to internal control:

- i. the MRC Executive Board
- ii. the Audit Committee
- iii. the Risk Management Committee

¹ The Department for Innovation Universities and Skills (DIUS) was established in June 2007 following the dissolution of the Department of Trade and Industry. The new Department brings together the science and innovation responsibilities from the DTI, and skills, further and higher education from the Department for Education and Skills.

2. The purpose of the system of internal control

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of the effectiveness. The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of MRC policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically. The system of internal control has been in place for the year ended 31 March 2007 and up to the date of approval of the Annual Report and Accounts and accords with Treasury guidance.

3. Capability to handle risk

The capacity to handle risk has been increased this year with the appointment of a qualified Risk Manager, whose responsibilities include overseeing all risk management activities, reporting on risk management to the MRC Council, Executive Board, Audit Committee and Intramural Operating Board as well as developing policies and guidance.

Executive Board

The Executive Board comprising the Chief Executive and directors is the executive body for the MRC, providing top-level leadership and guidance on risk management issues. The Executive Board regularly considers risk matters and reviews the Corporate Risk Register.

Intramural Operating Board (IOB)

The IOB reviews all major projects including receiving a summary of the top risks for each project and a report on how well risk management is being applied within each project.

Risk Management Committee (RMC)

The terms of reference and membership of the RMC have been reviewed during the year to strengthen the ongoing implementation of risk management in the MRC.

4. The risk and control framework

The Council

The Council of the MRC has a responsibility to ensure that high standards of corporate governance are observed at all times. The Council receives the Corporate Risk Register twice a year together with a report on the effectiveness of risk management. All papers presented to Council include a section on the risks of the item to be discussed.

Improvements to the risk and control framework are ongoing. Work this year to further strengthen the risk management process has included:

- Approval of the first risk management Standard Operating Procedure (SOP), covering risk identification and evaluation.
- A series of road shows to communicate the MRC approach to risk management and to identify the training requirements of staff.
- A review of all audit reports by the Risk Manager.
- An information leaflet for new staff summarising the risk management policy.
- Regional training workshops on continuity planning were held throughout 2006.
- A programme of testing unit continuity plans began in September 2006.

5. Review of effectiveness

As Accounting Officer, I have responsibility for reviewing the effectiveness of the systems of internal control. My review of the effectiveness of the system of internal control is informed by the work of the internal auditors and the executive managers within the MRC who have responsibility for the development and maintenance of the internal control framework, and comments made by the external auditors in their management letter and other reports. I have been advised on the implications of the result of my review of the effectiveness of the system of internal control by the Board, the Audit Committee and a plan to address weaknesses and ensure continuous improvement of the system is in place.

The Chief Executive holds regular stewardship reviews with directors of major business functions which include consideration of risk management as it relates to ongoing scientific and operational activity. Each unit director submits an Annual Statement of Internal Control. The implementation of an appropriate follow-up action plan where significant risks or weak controls are highlighted is part of the effectiveness review.

The Research Councils UK (RCUK) Research Funding Assurance Annual Report conducted in conjunction with the other research councils provides regularity assurance on the funding of research projects at UK universities and research organisations. Previously this group have provided 'dipstick testing reports'. Visits in 2006/07 report satisfactory assurance with one exception, where a rigorous follow-up action plan is being pursued. The MRC's internal audit is provided by the Research Council Internal Audit Service (RCIAS) which operates to Government Internal Audit Standards. The work of the internal auditors is informed by an analysis of risk to which the MRC is exposed and annual internal audit plans are based on this analysis. The risk analysis and internal audit plans are endorsed by the MRC Audit Committee and approved by me. The Head of Internal Audit's annual report includes an independent opinion on the adequacy and effectiveness of the MRC's system of internal control.

Early in 2007, the MRC and Ernst & Young jointly undertook a review of the MRC's role, structures, methods and operation. The review made a number of recommendations, most of which are being implemented. These included strengthening the governance role of the Council, developing a new strategic approach to research funding, and introducing changes to Head Office structures to ensure that the MRC is well-placed to deliver on its mission in the future. In introducing the new structures and responsibilities, the MRC will be better able to identify and manage the risks inherent in the rapidly changing environment of medical research.

A risk management work programme for 2007/08 has been approved by the Executive Board; this sets out a programme of work aimed at further embedding risk management across the MRC.

During 2007/08 the MRC will be purchasing and implementing appropriate software to support and enhance risk management activities.

6. Control issues

The Head of Internal Audit (HIA) has given a positive reasonable assurance concerning the adequacy and effectiveness of the risk management, control and governance systems established by management. The HIA is satisfied that reviews carried out over the period of this strategy have confirmed a reasonable standard of internal control within the organisation.

The RCIAS carried out an emerging findings audit of risk management at the end of 2006/07. The results concluded that the MRC was moving in the right direction on risk management. The emphasis is now on continuing progress and the implementation of the work programme for 2007/08. During the year the Executive Board carried out an assessment of risk management using the Risk Management Assessment Framework. The intention of this is to use the results of the assessment as a benchmark to measure improvements.

Management have continued to improve control as investment in projects brings major systems and processes on line. The Shared Service Centre in Swindon has been established and is operating effectively. Other major projects are also progressing although there have been difficulties in meeting some deadlines, for example with the Laboratory of Molecular Biology in Cambridge new build project, the National Institute for Medical Research, London, renewal project and the Human Resources Information System project. Improvements in financial reporting continue to be made enhancing the quality of information available to its staff for planning and decision making.

The HIA has identified a number of challenges facing the organisation, in particular, the RCUK Joint Service Centre project and the impact of the Cooksey report. The risks presented by these issues are known and being actively managed within the organisation.



**Sir Leszek Borysiewicz (appointed 1 October 2007)
Chief Executive and Accounting Officer**

Date: 14 December 2007

The Medical Research Council

The certificate and report of the Comptroller and Auditor General to the Houses of Parliament

I certify that I have audited the financial statements of the Medical Research Council for the year ended 31 March 2007 under the Science and Technology Act 1965. These comprise the statement of net expenditure, the balance sheet, the cashflow statement and statement of total recognised gains and losses and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

Respective responsibilities of the Council, Chief Executive and Auditor

The Council and Chief Executive as Accounting Officer are responsible for preparing the Annual Report, the Remuneration Report and the financial statements in accordance with the Science and Technology Act 1965 and the Secretary of State for Trade and Industry directions made thereunder and for ensuring the regularity of financial transactions. These responsibilities are set out in the Statement of Council's and Chief Executive's Responsibilities.

My responsibility is to audit the financial statement and the part of the Remuneration Report to be audited in accordance with relevant legal and regulatory requirements, and with International Standards on Auditing (UK and Ireland).

I report to you my opinion as to whether the financial statements give a true and fair view and whether the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the Science and Technology Act 1965 and Secretary of State for Trade and Industry directions made thereunder. I report to you whether, in my opinion, certain information given in the Annual Report, which comprises only the *Executive summary*, *People*, *Bringing discoveries to the market*, Management Commentary and the Remuneration Report, is consistent with the financial statements. I also report whether in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

In addition, I report to you if the Medical Research Council has not kept proper accounting records, if I have not received all the information and explanations I require for my audit, or if information specified by the Treasury regarding remuneration and other transactions is not disclosed.

I review whether the Statement on Internal Control reflects the Medical Research Council's compliance with Treasury's guidance, and I report if it does not. I am not required to consider whether this statement covers all risks and controls, or form an opinion on the effectiveness of the Medical Research Council's corporate governance procedures or its risk and control procedures.

I read the other information contained in the Annual Report and consider whether it is consistent with the audited financial statements. I consider the implications for my report if I become aware of any apparent misstatements or material inconsistencies with the financial statements. My responsibilities do not extend to any other information.

Basis of audit opinions

I conducted my audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. My audit includes examination, on a test basis, of evidence relevant to the amounts, disclosures and regularity of financial transactions included in the financial statements and the part of the Remuneration Report to be audited. It also includes an assessment of the significant estimates and judgements made by the Council and Chief Executive in the preparation of the financial statements and of whether the accounting policies are most appropriate to the Medical Research Council's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations which I considered necessary in order to provide me with sufficient evidence to give reasonable assurance that the financial statements and the part of the Remuneration Report to be audited are free from material misstatement, whether caused by fraud or error and that in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements and the part of the Remuneration Report to be audited.

Opinions

Audit opinions

In my opinion:

- The financial statements give a true and fair view, in accordance with the Science and Technology Act 1965 and directions made thereunder by the Secretary of State for Trade and Industry, of the state of the Medical Research Council's affairs as at 31 March 2007 and of its net expenditure for the year then ended;
- The financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the Science and Technology Act 1965 and Secretary of State for Trade and Industry directions made thereunder; and
- Information given within the Annual Report, which comprises only, the *Executive summary*, *People*, *Bringing discoveries to the market*, Management Commentary and the Remuneration Report is consistent with the financial statements.

Audit opinion on regularity

In my opinion, in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

Report

I have no observations to make on these financial statements.



John Bourn
Comptroller and
Auditor General

National Audit Office
157-197 Buckingham Palace Road,
Victoria, London, SW1W 9SP

18 January 2008

Statement of net expenditure

for the year ended 31 March 2007

Expenditure	Notes	2006/07	2005/06
		£000	(Re-stated, note 1e, 1f) £000
Staff costs	7	164,581	169,841
Other operating costs	8	111,079	96,448
Research grants	9	175,938	149,902
Other research	10	36,048	22,513
Postgraduate/training awards	11	52,176	51,804
International subscriptions	12	11,305	11,006
Commercial activities	13	17,185	15,647
Amortisation of intangible fixed assets	15	10,315	8,107
Depreciation of tangible fixed assets	16	19,079	17,365
Total operating expenditure		597,706	542,633
Income			
Release of deferred income on donated asset	23	115	91
Commercial activities	13	33,978	30,605
Other income	5	5,711	5,059
Total operating income		(39,804)	(35,755)
Net operating expenditure		557,902	506,878
Interest receivable	6	(8,642)	(4,020)
Notional cost of capital	lj	16,097	13,465
Amount payable to the Office of Science and Innovation	14	201	282
Other finance income	7e	(13,201)	(10,485)
Unwinding of discount on provisions	21	243	231
(Gain)/loss on disposal of tangible fixed assets		(780)	5,262
Gain on disposal of intangible fixed assets		-	(73,029)
Gain on disposal of investments		(10,934)	(150)
Net expenditure for the year		540,886	438,434
Reversal of notional cost of capital		(16,097)	(13,465)
Net expenditure for the year after reversal of notional cost of capital		524,789	424,969

Balance sheet

as at 31 March 2007

		2006/07	2005/06
	Notes	£000	(Re-stated, note 1e, 1f) £000
Fixed assets			
Intangible assets	15	87,313	79,137
Tangible assets	16	291,782	253,484
Investments	17	2,038	7,271
		381,133	339,892
Current assets			
Stocks	18	1,787	2,006
Debtors	19	40,136	46,727
Cash at bank and in hand		255,574	189,805
		297,497	238,538
Creditors: amounts falling due within one year	20	(138,697)	(101,069)
Net current assets		158,800	137,469
Total assets less current liabilities		539,933	477,361
Provisions for liabilities and charges	21	(16,551)	(16,733)
Net assets excluding pension asset		523,382	460,628
Pension asset	7e	100,488	45,819
Net assets		623,870	506,447
Capital and reserves			
Revaluation reserve	22	66,310	68,170
Intellectual property reserve	22	87,313	79,137
Donated asset reserve	22	753	653
		154,376	147,960
Accumulated surplus on general reserve excluding pension reserve	22	369,006	312,668
Pension reserve	22	100,488	45,819
Accumulated surplus on general reserve including pension reserve		469,494	358,487
Government funds	22	623,870	506,447

The notes at pages 63 to 79 form part of these Accounts.



Sir Leszek Borysiewicz (appointed 1 October 2007)
Chief Executive and Accounting Officer

Date: 14 December 2007

Cash flow statement

for the year ended 31 March 2007

		2006/07	2005/06
	Notes	£000	(Re-stated, note 1e, 1f) £000
Net cash outflow from operating activities	23	(487,365)	(429,846)
Return on investments and servicing of finance			
Interest received	6	8,642	4,020
Payments to the Office of Science and Innovation	14	(201)	(282)
Net cash inflow from returns on investments and servicing of finance		8,441	3,738
Net cash outflow before capital expenditure and financial investment		(478,924)	(426,108)
Capital expenditure and financial investment			
Payments to acquire tangible fixed assets and investments		(44,381)	(58,314)
Receipts from sale of tangible fixed assets		831	672
Net receipt from sale of intangible fixed assets		-	92,887
Receipt from sale of investments		16,063	150
Net cash (outflow)/inflow from capital expenditure		(27,487)	35,395
Net cash outflow before financing		(506,411)	(390,713)
Financing			
Grant-in-aid received		503,477	459,543
Other capital funding received		215	269
Contributions from other government departments		32,477	31,202
Contribution and grants from other bodies		35,913	30,840
Contribution for licence fees		98	98
Net cash inflow from financing		572,180	521,952
Increase in cash		65,769	131,239

The notes at pages 63 to 79 form part of these Accounts.

Statement of total recognised gains and losses

for the year ended 31 March 2007

	2006/07	2005/06 (Re-stated, note 1e,1f)
	£000	£000
Net expenditure for the year	(540,886)	(438,434)
Reversal of notional cost of capital	16,097	13,465
Gains on revaluation of fixed assets	24,361	3,415
Grant-in-aid received in year	503,477	459,543
Contributions from other government departments	32,477	31,202
Contributions and grants from other bodies	35,913	30,840
Contribution for licence fees	98	98
Movement in donated asset reserve:		
- Other capital funding received	215	269
- Release of donated asset reserve included in the net expenditure for the year	(115)	(91)
Actuarial gain in pension scheme	45,786	18,217
Total recognised gains for the year	117,423	118,524

Analysis of actuarial gain/(loss) recognised in the statement of total recognised gains and losses

	2006/07	2005/06	2004/05	2003/04	2002/03
	£000	£000	£000	£000	£000
Actual return less expected return on pension scheme assets	35,763	111,067	13,226	78,378	(169,759)
Experience gains and losses arising on the scheme liabilities	(2,105)	3,448	5,988	9,429	(209)
Changes in assumptions underlying the present value of liabilities	12,128	(96,298)	(58,672)	(29,799)	(9,185)
Actuarial gain/(loss) recognised in statement above	45,786	18,217	(39,458)	58,008	(179,153)

Analysis of actuarial gain/(loss) expressed as a percentage of the scheme's assets and liabilities at the balance sheet date

	2006/07	2005/06	2004/05	2003/04	2002/03
	%	%	%	%	%
Actual return less expected return on pension scheme assets	4.16	14.37	2.14	13.83	(37.13)
Experience gains and losses arising on the scheme liabilities	(0.28)	0.47	1.00	1.87	(0.47)
Actuarial gain/(loss) recognised in statement above	6.03	2.51	(6.61)	11.51	(39.87)

The notes at pages 63 to 79 form part of these Accounts.

Notes to the Accounts

1. Accounting policies

a. Basis of accounting

The Accounts have been prepared in accordance with a direction given by the Secretary of State for Trade and Industry, with the approval of the Treasury, in pursuance of Section 2(2) of the Science and Technology Act 1965 and in accordance with the Government's *Financial Reporting Manual*. The Accounts have been prepared under the historical cost convention, modified to include the revaluation of tangible and intangible fixed assets and investments, and the valuation of stock to reflect current costs. Without limiting the information given, the Accounts meet the accounting and disclosure requirements of the Companies Act 1985 and accounting standards issued or adopted by the Accounting Standards Board so far as these requirements are appropriate. The Accounts Direction exempts the MRC from the requirement to produce a note of historical cost profits, assets and losses.

b. Tangible fixed assets and depreciation

Expenditure on fixed assets includes the purchase of land, buildings and equipment costing £3,000 or more. Tangible fixed assets are included at cost or at valuation. Equipment, excluding computers and software, is revalued annually using appropriate indices. Land and buildings are professionally revalued every five years and in the intervening period relevant indices are used. (Buy-back lease arrangements are valued every five years only.) The basis of valuation for land and buildings is open market value for existing use where this can be established. However, because of the specialised nature of the MRC's properties, most valuations are on a depreciated replacement cost basis. Any surplus or temporary deficit on revaluation is taken to a revaluation reserve. Any permanent impairments in value are charged to the statement of net expenditure in the year in which they arise.

Leasehold land is now being depreciated over a period of up to 60 years subject to the length of the lease as a result of a change in the estimation of its useful economic life. The effect on the statement of net expenditure of implementing changes to existing useful economic lives is an additional depreciation charge of £1,243k.

Increased depreciation charges arising from revaluations are matched by transfers from the revaluation reserve to the general reserve. On disposal of a revalued asset, the resulting element of the revaluation reserve that is realised is transferred directly to the general reserve.

Provision is made for depreciation on all tangible fixed assets at rates calculated to write off each asset evenly to its residual value over its expected useful life, as follows:

Freehold land	Not depreciated
Leasehold land	Up to 60 years (subject to length of the lease)
Freehold buildings	Up to 60 years
Leasehold buildings	Up to 60 years (subject to length of the lease)
Leasehold buildings (buy-back)	Up to 60 years
Major facilities (items costing over £50,000)	11 years
Other scientific equipment	5 to 15 years
Computers and software	3 years
Engineering, office and catering equipment	8 years
Motor vehicles	5 years
Assets under construction	Not depreciated until brought into use

c. Intangible fixed assets and amortisation

The values of patents, licences and royalties held by the MRC are capitalised as intangible fixed assets based on their expected income streams. Income from these patents, licences and royalties is generated from agreements between the MRC and companies engaged in the commercial exploitation of MRC inventions and research. The values of these intangible fixed assets are amortised over the period these agreements are in force. For most cases this is between seven and 15 years, and such assets are not capitalised until the income stream is reasonably certain. Income streams are reviewed each year. Any surplus or temporary deficit on valuations following such reviews is taken to a revaluation reserve.

d. Ownership of equipment purchased with MRC research grants

Equipment purchased by an institution with research grant funds supplied by the MRC belongs to the institution and is not included in the MRC's tangible fixed assets. Through the Conditions of Grant applied to funded institutions, the MRC reserves the right to determine the disposal of such equipment and of the proceeds of any sale.

e. Grant-in-aid

The treatment for grant-in-aid reflects the initial adoption of the accounting requirements of the 2006/07 *Financial Reporting Manual* 'treatment of grant-in-aid transactions and other specific grants'. Grant-in-aid is now to be treated as financing, rather than income. The previous year's grant-in-aid has been recognised as a prior year adjustment and therefore comparative figures for 2005/06 have been restated.

Grant-in-aid for the purchase of land is now to be credited to the general reserve and not to the capital land reserve. The previous year's balance in the capital land reserve has therefore been written back to the general reserve to reflect this change in policy.

Grant-in-aid for revenue purposes and for the purchase of fixed assets in general is credited to general reserve in the year in which it is received. Capital grant-in-aid granted for a specific project(s) is credited to a government grant reserve and released to the statement of net expenditure over the estimated operational lives of the related assets.

f. Other income

Other income is shown net of trade discount, value added tax and other taxes. Contributions for licence fees, contributions from other government bodies and contributions and grants from other bodies (see notes 2, 3 and 4) are now treated as financing and credited to general reserve, in the same way as grant-in-aid, referred to in 1e, grant-in-aid above. These are collaborative agreements whereby the grantor does not directly receive goods and services in return for the grant. The previous year's income has been recognised as a prior year adjustment and therefore comparative figures for 2005/06 have been restated.

g. Investments

Listed investments are shown at market value. Unlisted investments are shown at cost. Any surplus or temporary deficit on revaluation is taken to a revaluation reserve. Any permanent impairment in value is charged to the statement of net expenditure account in the year in which it arises.

h. Stocks

Livestock and consumable stores are included in the balance sheet at cost.

i. Research and development

As a research organisation, all the MRC's research and development expenditure is charged to the statement of net expenditure when it is incurred.

j. Notional costs

In line with Treasury requirements, a notional interest charge is included in the accounts to reflect a charge for the use of capital in the business in the year, as the MRC has no specific interest bearing debt. In accordance with Treasury guidance, the calculation is based on a 3.5 per cent rate of return on average net assets employed. Notional cost of capital charged during the period of the Account was £16,097,000 (2005/06 = £13,465,000).

k. Foreign currencies

Monetary assets and liabilities denominated in foreign currencies are translated at the rates of exchange ruling at the balance sheet date. Transactions in foreign currencies are recorded at the rate ruling at the time of the transaction. All exchange differences are taken to the statement of net expenditure.

l. Value added tax (VAT)

As the MRC is partially exempt for VAT purposes, all expenditure and fixed asset purchases are shown inclusive of VAT where applicable. Residual input tax reclaimable by the application of the partial exemption formula is taken to the statement of net expenditure as negative expenditure.

m. Pension costs

Employer superannuation costs are based on an actuarially derived calculation under Financial Reporting Standard No.17 (FRS17). See note 7d.

n. Early retirement costs

Compensation payments are provided for in the statement of net expenditure. Obligations relating to those former members of staff aged 50 or over are provided for until their normal date of retirement.

Unwinding of discount: the provision for early retirement costs is discounted at 2.2 per cent. The unwinding of the discount has been charged to the statement of net expenditure.

o. Operating Leases

Operating lease charges are recognised in the statement of net expenditure in the year to which they relate.

2. Parliamentary grant-in-aid and contribution to licence fees

The grant-in-aid and contributions in respect of (Animal) Licence Fees of £98,000 (2005/06 = £98,000) were provided by the Department of Trade and Industry (DTI) for the financial year 2006/07. The parliamentary grant-in-aid for 2006/07 was £503,477,000. Grant-in-aid and animal licence fees received are now treated as financing and credited directly to reserve.

	2006/07 £000	2005/06 £000
Grant allocation received and credited to general reserve	503,477	459,542

3. Contributions from other government departments

	2006/07 £000	2005/06 £000
Department of Health	22,836	24,947
Department for International Development	5,067	3,926
Ministry of Defence	309	398
NHS Executive	1,567	195
Department of Trade and Industry	-	31
Foods Standards Agency	1,145	917
Scottish Home and Health Departments	443	365
Other	1,110	423
Total	32,477	31,202

Contributions from other government departments received are now treated as financing and credited to general reserve.

4. Contributions and grants from other bodies

	2006/07 £000	2005/06 £000
Other research councils	3,491	3,350
Charities	15,516	14,804
Collaboration with industry	3,343	1,095
European Commission	4,936	3,189
World Health Organization	43	103
Human Frontiers Science Program	234	253
Health Authorities and NHS Trusts	1,622	1,529
Universities	3,587	2,834
Other sources	3,141	3,683
Total	35,913	30,840

Contributions and grants from other bodies received are now treated as financing and credited to general reserve.

5. Other income

	2006/07 £000	2005/06 £000
Sales and other income	5,711	5,059

The MRC's sales income is derived from laboratory and library services, as well as proceeds from sales of radioisotopes and other items.

6. Interest receivable

	2006/07 £000	2005/06 (Re-stated) £000
Interest earned on the MRC's Commercial Fund bank balances	8,214	3,678
Interest earned on the MRC's other Euro and other foreign currency accounts	227	60
Interest earned on the MRC's other Sterling bank balances	201	282
Total	8,642	4,020

Interest earned on the MRC's Commercial Fund bank balances was previously reported under income from commercial activities.

7. Staff costs

	2006/07 £000	2005/06 £000
Employee costs (note 7b)	164,334	159,684
Non-permanent staff	5,300	6,048
Remuneration to the MRC's Council and committee members (note 7c)	235	249
Early retirement costs (note 21)	1,130	8,215
Gross staff costs	170,999	174,196
Less commercial activities (note 13)	(6,418)	(4,355)
Staff costs for general activities	164,581	169,841

7a. Staff numbers

The number of employees during the year was made up as follows:

	2006/07	2005/06
Job functions		
Science	1,258	1,222
Research project support	1,054	1,057
Management, administration and policy	553	551
Technical services	447	422
Infrastructure	160	172
Locally employed staff (overseas)	762	983
Total	4,234	4,407

7b. Employee costs

	2006/07 £000	2005/06 £000
Salaries and wages	134,050	132,973
Social security costs	10,462	10,395
Other pension costs (note 7d)	19,822	16,316
Total	164,334	159,684

7c. Remuneration to the MRC's Council and committee members

	2006/07 £000	2005/06 £000
Fees and honoraria	230	242
Social security costs	5	7
Total	235	249

7d. Other pension costs

	2006/07 £000	2005/06 £000
Total pension costs	£000	£000
Current service costs (net of employee contributions relating to MRCPS)	19,799	16,290
Other schemes	23	26
Total	19,822	16,316

7e. MRCPS

The MRC operates a funded pension scheme (MRCPS) providing benefits based on service and final pensionable pay at the normal retirement age of 65. The scheme is a defined benefit scheme that prepares its own scheme statements. Benefits accrue at the rate of 1/80th of pensionable salary for each year of service. In addition a lump sum equivalent to three years' pension is payable on retirement. Members pay contributions of six per cent pensionable earnings in the principal section. In addition to the principal section, the supplementary benefits section exists to provide additional benefits in the event of ill-health retirement or death-in-service. It is solely funded by members' contributions.

The required MRCPS contribution rate is assessed every three years in accordance with advice of the Government Actuary; the present MRCPS employers' contribution rate is 11 per cent. The latest actuarial assessment of the MRCPS was at 31 December 2004 at which the market value of the assets of the MRCPS was £890m (2001 = £758m). The actuarial value of the assets was sufficient to cover 106 per cent of the benefits that had accrued to members after allowing for expected future increases in earnings. On a minimum funding requirement basis, the scheme is more than 120 per cent funded.

FRS17: the valuation used for FRS17 disclosures has been based on the data for the most recent actuarial valuations as at 31 December 2004, updated to take account of the requirements of FRS17 in order to assess the liabilities of the scheme at 31 March 2007. The mortality assumptions included within the figures are that male (female) members will live to approximately age 90 (93).

Financial assumptions used to calculate scheme liabilities

	2006/07 %	2005/06 %	2004/05 %	2003/04 %	2002/03 %
Rate of increase on pensionable salaries	5.00	4.60	4.30	4.30	3.90
Rate of increase on pension payments	3.50	3.00	2.80	2.80	2.40
Discount rate	5.40	4.90	5.40	5.40	5.40
Inflation rate	3.50	3.00	2.80	2.80	2.40
Expected return on equities	7.25	6.84	7.25	7.36	7.20
Expected return on bonds	4.63	4.23	4.63	4.69	4.52
Expected return on overall fund	7.00	6.60	6.90	7.10	6.80

The assets and liabilities in the scheme

	2006/07 Market value £000	2005/06 Market value £000
Assets		
- Equities and property	771,978	696,566
- Bonds and cash	87,565	76,210
	<hr/> 859,543	<hr/> 772,776
Actuarial value of liability	(759,055)	(726,957)
Surplus in scheme	<hr/> 100,488	<hr/> 45,819

The movements in the scheme surplus

	2006/07 £000	2005/06 £000
Surplus at beginning of year	45,819	22,230
Current service cost (including employee contributions)	(25,637)	(22,197)
Employee contributions	5,815	5,907
Current service costs net of employee contributions	<hr/> (19,822)	<hr/> (16,290)
Employer contributions	15,504	11,177
Other finance income	13,201	10,485
Actuarial gain	45,786	18,217
Surplus at end of year	<hr/> 100,488	<hr/> 45,819

Other finance income

	2006/07 £000	2005/06 £000
Expected return on pension scheme assets	51,003	42,711
Interest on pension scheme liabilities	(37,802)	(32,226)
Net return	<hr/> 13,201	<hr/> 10,485

Other schemes

The total superannuation contributions paid by the MRC in 2006/07 were £23,074 (2005/06 = £26,110). These amounts represent employers' contributions at five per cent and ten per cent for a small number of long-serving members of the National Health Service Superannuation scheme (NHSS) and Federated Superannuation Scheme of Universities (FSSU) respectively.

The NHSS is a multi employer unfunded scheme, and the MRC is unable to identify its share of the underlying assets and liabilities on a consistent and reasonable basis for inclusion in its financial statements.

The FSSU is a multi employer funded scheme, where the benefits are secured by assurance policies. Due to the conditions of the annuity market, the MRC does not consider any surplus/deficits accruing to the employer to be material.

8. Other operating costs

	2006/07 £000	2005/06 £000
Rent and rates	5,174	5,286
General maintenance, cleaning, heating and lighting	9,851	7,721
Maintenance of buildings	7,593	7,531
Office supplies, printing, and stationery	2,754	2,778
Laboratory supplies	25,604	24,279
Management consultancy and other professional fees	16,075	12,870
Postage and telephone	2,507	2,539
Audit fee	61	50
Travel, subsistence and hospitality	7,718	6,976
Computing	4,260	3,582
Equipment servicing	4,267	4,375
Minor equipment	3,006	2,276
Miscellaneous	13,665	12,002
Transport costs	680	620
Exchange rate loss/(gains)	1,123	(407)
Bad debts charge	81	87
Scanning services	4,994	-
Decommissioning costs (see note 21)	1,666	3,883
Total	111,079	96,448

9. Research grants

	2006/07 £000	2005/06 £000
Research Grants	111,218	84,952
Centre Grants	6,606	3,664
Collaboration Grants	14,696	12,474
Discipline Hopping Awards	1,248	1,330
Link Award	387	727
New Investigator Award	3,738	1,512
Trial Grant	11,433	9,794
Hearing Screening Programme	14,320	15,394
European Bioinformatics Institute Capital Grant	-	5,468
Other	12,292	14,587
Total	175,938	149,902

10. Other research

	2006/07 £000	2005/06 £000
Contributions to special research programmes	36,048	22,513

11. Postgraduate/training awards

	2006/07 £000	2005/06 £000
Research studentships/advanced course studentships	23,602	24,058
Post-doctoral fellowships	28,574	27,746
Total	52,176	51,804

12. International subscriptions

	2006/07 £000	2005/06 £000
International Agency for Research on Cancer	749	697
European Molecular Biology Conference	1,457	1,386
European Molecular Biology Laboratory	8,102	7,977
Human Frontier Science Program	817	790
European Science Foundation	180	156
Total	11,305	11,006

13. Commercial activities

	2006/07 £000	2005/06 £000
Income during the year:		
- Royalties and other income	33,978	30,605
- Interest income (note 6)	8,214	3,678
	42,192	34,283
Expenditure during the year:		
- Staff costs (note 7)	6,418	4,355
- Other expenditure	10,767	11,292
	(17,185)	(15,647)
Net income for the year	25,007	18,636

The MRC requires a financial return from successful commercial exploitation of original MRC research. Such income arises from royalties, equity stakes and other forms of receipts as a result of licensing agreements of MRC inventions and know-how.

Income and expenditure relating to commercial activities is credited and charged to the statement of net expenditure, with its cumulative balance represented within the general reserve on the balance sheet. The cash surplus on such activities as at 31 March 2007 was £198,912,000 (2005/06 = £147,567,000).

14. Amounts payable to the Office of Science and Innovation

	2006/07 £000	2005/06 £000
Interest earned on the MRC's sterling bank balances (note 6)	201	282
Surrendered to Office of Science and Innovation	201	282

Interest earned on the MRC's sterling bank balances, together with any underspend for licence fees payable under the Animal Licence Act 1986, are surrendered to the consolidated fund through the Office of Science and Innovation.

15. Intangible fixed assets

Intangible fixed assets include patents and licences generated by MRC research.

	2006/07 £000
At valuations	
Net book value as at 1 April 2006	79,137
Additions	7,746
Disposals	-
Revaluations	10,745
Charge for the year	(10,315)
Net book value as at 31 March 2007	87,313

MRC received a one off payment of £27m after the year end from Genentech in respect of a fully-paid licence relating to Intellectual Property rights as they apply to certain monoclonal antibody therapeutic products.

16. Tangible fixed assets

	Land and buildings ¹ £000	Assets under construction £000	Equipment and vehicles £000	Total £000
Cost or valuation				
At 1 April 2006	334,719	27,889	165,724	528,332
Additions	6,647	32,546	12,259	51,452
Reclassification	6,809	(8,079)	1,270	-
Disposals	-	-	(3,543)	(3,543)
Revaluation	13,070	-	3,647	16,717
At 31 March 2007	361,245	52,356	179,357	592,958
Depreciation				
At 1 April 2006	158,747	-	116,101	274,848
Provided during the year	6,721	-	12,358	19,079
Disposals	-	-	(3,495)	(3,495)
Revaluation	7,352	-	3,392	10,744
At 31 March 2007	172,820	-	128,356	301,176
Net book value				
As at 31 March 2007	188,425	52,356	51,001	291,782
As at 1 April 2006	175,972	27,889	49,623	253,484

	2006/07 £000	2005/06 £000
The net book value of land and building comprises:		
Freehold	57,711	59,958
Long leasehold	127,185	103,475
Short leasehold	3,529	12,539
	188,425	175,972

¹ Tangible fixed assets include £39,490,748 in respect of freehold land which is not depreciated.

Land and buildings were valued using relevant indices to establish valuations at 31 March 2007 and in accordance with Statements of Asset Valuation Practice (SAVP) and Royal Institute of Chartered Surveyors (RICS) guidance notes.

The last professional revaluation of land and buildings in the UK was performed by Powis Hughes and Associates, Chartered Surveyors, at 1 December 2003. Professional revaluations of land and buildings at the MRC's Laboratories in The Gambia and Uganda were performed locally by Sphinx Associates, Chartered Quantity Surveyors in association with BB Barry Consultancy Service (Land Economist) at 31 October 2003 and BBL (U) Chartered Quantity Surveyors in December 2003, respectively.

17. Fixed asset investments

	Subsidiary companies £000	Joint ventures £000	Other investments £000	Total investments £000
As at 1 April 2005	-	-	7,271	7,271
Additions	-	-	-	-
Disposal	-	-	(5,129)	(5,129)
Revaluation	-	-	(104)	(104)
Valuation as at 31 March 2007	-	-	2,038	2,038

17a. Subsidiary companies

MRC Technology

MRC Technology Ltd (MRCT) is a company limited by guarantee and a registered charity which was set up to provide a laboratory base for project management of applied research funded by industrial partners and to offer infrastructure to 'spin-out' companies. Since April 2000 it has also managed the exploitation of MRC intellectual property under a service agreement with the MRC.

MRCT is a separate legal entity that prepares its own accounts under a different format. Due to its charitable status, the risks and rewards of MRCT do not lie with the MRC, and the MRC cannot exercise control over its decisions. MRCT has therefore been excluded from consolidation.

For the year ended 31 March 2007 the accounts of MRCT revealed a profit of £376,242 (2006 = £4,335,162 profit) and net assets of £10,675,918 (2006 = £10,113,457).

During the year ended 31 March 2007 the MRC provided goods and services to MRCT to a value of £5,851,062 (2005/06 = £4,280,384). These goods and services were costed on the same basis on which they would be provided between departments within the MRC. As at 31 March 2007, the MRC was owed £1,061,920 (2005/06 = £2,062,152) and owed £1,128,365 to MRCT (2005/06 = £161,694).

17b. Joint ventures

Hammersmith Imanet Limited

The MRC holds 25 per cent of the ordinary shares of the company whose capital and reserves were valued at (£1,536,493) at 31 December 2006. The profit and loss account for the period then ended recorded a loss of £751,285 (2005/06 = £1,870,865 loss). Originally a joint venture with Amersham plc, in 2004 Amersham plc was acquired by the American firm General Electric (GE) and incorporated into the GE Healthcare business segment. The joint venture agreement provides for the provision of scanning services in order to support the PET imaging programmes of the MRC Clinical Sciences Centre. In consideration for this service the MRC agrees to pay £4.99m (VAT inclusive), per year, adjusted for inflation in future years, for a contract period 1 April 2006 to 31 March 2011. During the year to 31 March 2007 this amounted to £4,993,750 (2005/06 = £1,116,250). The investment in Hammersmith Imanet Ltd is shown at nil to reflect the MRC's share of the company's net assets at 31 March 2007.

17c. Other investments

Description of holding	Number of shares held	Holding %	Market value at 31 March 2007 £000
Quoted			
Ardana Ltd	416,460	0.75	446
Galapagos NV (formerly Biofocus plc)	59,919	0.47	363
Innovata plc (formerly M L Laboratories plc)	204,190	0.04	51
Natus Medical Inc	7,066	0.04	64
Sangamo Biosciences Inc	165,255	0.54	570
Topo Targets A/S	113,916	0.28	370
Vernalis plc	310,392	0.14	174
Amylin Pharmaceuticals Inc	20,000 (warrants)	-	-
			2,038

At the close of business on 31 March 2007 the price per share of MRC's shareholdings listed on the London stock exchange, the AIM, the Nasdaq and the Danish Stock Exchange were as follows:

Ardana Ltd	107p
Galapagos NV	605p
Innovata plc	25p
Natus Medical Inc*	\$17.90
Sangamo Biosciences Inc*	\$6.85
Topo Targets A/S [~]	DKK35.7
Vernalis plc	56p

* The share prices of the two listed US companies, were converted at a rate of US \$1.9683 = £1.00

[~] The share price of the listed Danish company was converted at a rate of DKK 10.982 = £1.00

Private unquoted

ASM Scientific Ltd	27,000
Avidis S.A.	594
CM Therapeutics Ltd	93,600
D-Gen Ltd	13,162
Idectus Ltd	6,400
Oxxon Therapeutics Ltd	10,332
Rain Dance Technologies Inc	200,000
Senexis Ltd	10

These companies represent the MRC's interest in enterprises engaged in the commercial development of MRC inventions and know-how. These equity positions were received in return for company access to MRC intellectual property.

During the year, MRC's shares in Cambridge Antibody Technology plc and Domantis Ltd were sold for £8,712k and £7,351k resulting in a gain on disposal of £3,583k and £7,351k respectively.

MRC net-exercised its warrant for Amylin Pharmaceuticals Inc after the year end. Proceeds of £296k were realised.

18. Stock

	2006/07 £000	2005/06 £000
Consumable stores and livestock	1,787	2,006

19. Debtors

	2006/07		2005/06	
	£000	£000	£000	£000
Trade debtors	6,519		9,540	
Less provisions for bad debts	(199)		(364)	
		6,320		9,176
Other debtors		394		3,307
Accrued income		25,550		23,228
Prepayments		7,872		11,016
Total		40,136		46,727

Intra-government balances

At the end of the year, the MRC had debtor balances with other government bodies totalling £1,669k (2005/06 = £1,641k) comprising the following: government agencies: £1,386k (2005/06 = £1,455k), local authorities: £45k (2005/06 = £14k), NHS trusts and hospitals: £238k (2005/06 = £172k).

20. Creditors: amounts falling due within one year

	2006/07 £000	2005/06 £000
Trade creditors	59,113	52,280
Accruals	58,589	29,028
Taxation and social security	3,156	3,528
Income received in advance	15,424	14,919
Others	2,415	1,314
Total	138,697	101,069

Intra-government balances

During the year, the MRC had creditor balances with other government bodies totalling £1,116k (2005/06 = £226k) comprising the following: government agencies: £978k (2005/06 = £104k), local authorities: £2k (2005/06 = £2k), NHS trusts and hospitals: £136k (2005/06 = £120k).

21. Provisions for liabilities and charges

	Early retirement compensation scheme £000	Redundancy costs £000	Other costs £000	Total provisions £000
At 1 April 2006	11,848	959	3,926	16,733
Amount provided in year	1,130	1,050	1,666	3,846
Transfer to accruals	-	(239)	-	(239)
Unwinding of discount	243	-	-	243
Amount expended in year	(3,312)	(720)	-	(4,032)
At 31 March 2007	9,909*	1,050	5,592	16,551

*This figure represents the MRC's liability for annual compensation payments up to the year 2021.

Early retirement compensation scheme

There are two categories of early retirement: compulsory and flexible. Both are applicable to all members of staff but different terms apply depending on whether the staff member is under or over age 50. (For staff joining from April 2006 onwards, minimum retirement age is 55).

Aged 50 or over: Annual compensation payments are made, equivalent to enhanced pension benefits, from the date of early retirement to normal retirement date. In the case of compulsory retirement only, there is also a lump sum compensation payment of up to six months' salary.

Aged under 50: Compensation takes the form of a lump sum payment based on age, length of service, and final salary; payment levels are higher in the case of compulsory retirement.

Methods of early retirement: Compulsory retirement is imposed where a redundancy situation is identified following either a management review of support services or quinquennial peer review of the science, and redeployment to other MRC work is not possible.

Flexible early retirement is voluntary and is available at the invitation of management on grounds of limited efficiency or structure.

Redundancy costs

A provision has been made during the year for restructuring at the MRC unit in The Gambia and the Clinical Sciences Centre in London. The provision in relation to the set up of Shared Service Centre was fully used in the year.

Other costs

This is for the decommissioning of a cyclotron and associated apparatus from the former MRC Cyclotron Unit at Hammersmith Hospital. The lease expires in 2052. The liability amounting to £5,153m has been discounted at 12 years, which is when the obligation is expected to be settled. There is also a provision of £439k for the decommissioning costs for the disposal of High Activity Sealed Sources that are currently being used in some MRC units.

22. Capital and reserves

	Deferred grant-in-aid reserve £000	Revaluation reserve £000	Capital land reserve £000	Intellectual property reserve £000	Donated asset reserve £000	Pension reserve £000	General reserve £000	Total government funds £000
At 1 April 2006	155,320	68,170	36,612	79,137	653	45,819	120,736	506,447
Prior year adjustments: grant-in-aid	(155,320)	-	(36,612)	-	-	-	191,932	-
At 1 April 2006 (Re-stated)	-	68,170	-	79,137	653	45,819	312,668	506,447
Other capital funding received	-	-	-	-	215	-	-	215
Grant-in-aid financing received in year (note 2)	-	-	-	-	-	-	503,477	503,477
Contributions from other government departments (note 3)	-	-	-	-	-	-	32,477	32,477
Contributions and grants from other bodies (note 4)	-	-	-	-	-	-	35,913	35,913
Contribution for licence fees (note 2)	-	-	-	-	-	-	98	98
Released to statement of net expenditure	-	-	-	-	(115)	-	-	(115)
Additions during year	-	-	-	7,746	-	-	-	7,746
Revaluations during year	-	5,870	-	10,745	-	-	-	16,615
Actuarial gain/(loss) in the pension scheme	-	-	-	-	-	45,786	-	45,786
Transfer to general reserve – depreciation	-	(2,603)	-	(10,315)	-	-	12,918	-
Transfer to general reserve – disposals	-	*(5,127)	-	-	-	-	5,127	-
Transfer to pension scheme	-	-	-	-	-	8,883	(8,883)	-
Net expenditure for the year	-	-	-	-	-	-	(540,886)	(540,886)
Reversal of notional costs of capital	-	-	-	-	-	-	16,097	16,097
At 31 March 2007	-	66,310	-	87,313	753	100,488	369,006	623,870

* In respect of the revalued element of disposed fixed assets and investment in the year.

23. Reconciliation of the operating deficit to net cash outflow from operating activities

	2006/07	2005/06
	£000	(Re-stated) £000
Net operating expenditure	(557,902)	(506,878)
Depreciation charge	19,079	17,365
Amortisation charge	10,315	8,107
Other non-cash items – FRS17 pension costs	4,319	5,290
Transfer of asset	-	5,468
Unwinding of discount provisions	(243)	(231)
Release of deferred income	(115)	(91)
(Decrease)/increase in provision for liabilities and charges	(182)	7,940
Decrease in stocks	219	537
Decrease (increase) in debtors	6,591	(13,202)
Increase in creditors	30,554	45,849
Net cash inflow from operating activities	(487,365)	(429,846)

24. Reconciliation of movement in cash to movement in net funds

	2006/07	2005/06
	£000	£000
Net funds at 1 April 2006	189,805	58,566
Increase in cash	65,769	131,239
Balance at 31 March 2007	255,574	189,805

Balance includes £198,912,000 (2005/06 = £147,567,000) of Commercial Fund deposits.

25. Contingent liabilities

There were no contingent liabilities this year.

26. Commitments

Capital

The MRC had estimated future commitments to capital expenditure, which had been contracted but not provided for at the balance sheet date of £61,000,000 (£35,675,000 at 31 March 2006).

Research awards

	£000
Forward commitments on research awards to higher education institutes:	
2007-2008	163,037
2008-2009	120,468
2009-2010	71,537
2010-2011	30,224
2011-2015	11,587

27. Related party transactions

The MRC is a non-departmental public body sponsored by the DTI. For the purposes of *Financial Reporting Standard 8*, the DTI is regarded as a related party. During the year, the MRC has had various material transactions with the DTI and other bodies for which the DTI is regarded as the parent department; namely the Economic and Social Research Council, the Engineering and Physical Sciences Research Council and the Biotechnology and Biological Sciences Research Council.

Some council members act as trustees for two registered charities, the Medical Research Foundation and the Fleming Memorial Fund. These funds are administered by the MRC, and therefore regarded as a related party. The MRC provided free resources to the charity in respect of administration, to the value of £88.7k.

See note 17 for transactions with subsidiary and joint venture undertakings. During the year, the following material transactions with the MRC's Council, board and committee members took place in respect of awards funded by the MRC.

Name	Number of awards	Value (£)
Dr J Colyer	1	100,724
Dr J Langhorne	1	431,892
Dr J McCauley	1	368,936
Dr W S Barclay	2	718,828
Dr X N Xu	1	385,504
Professor A Carr	1	2,100,988
Professor A Clark	1	323,996
Professor A J McMichael	2	1,210,618
Professor B K Park	1	1,379,084
Professor C A Sabin	1	323,396
Professor C Cooper	1	3,754,798
Professor C Haslett	1	1,368,172
Professor C Ison	2	455,594
Professor C P Day	1	1,379,084
Professor C ffrench-Constant	1	295,004
Professor D J Balding	1	1,244,896
Professor G D Murray	1	1,006,332
Professor G Dunn	3	2,845,020
Professor G Garnett	1	1,713,948
Professor G J Hart	1	331,720
Professor G R Screaton	1	335,244
Professor I M Harvey	1	3,754,798
Professor J C Mathers	1	612,780
Professor J Cairns	1	1,458,280
Professor J L Donovan	1	280,208
Professor J Stephenson	1	341,768
Professor J Whittaker	2	472,708
Professor J Williams	1	487,704
Professor K G Nicholson	1	1,002,080
Professor K Wellings	2	574,657
Professor L Piddock	1	647,048
Professor M Chaplain	1	85,240
Professor M Fitzgerald	1	781,008
Professor M I McCarthy	4	3,576,282
Professor M Wilkins	1	636,352
Professor N J Wareham	1	1,878,956
Professor P Elliott	1	636,352
Professor P J Diggle	1	395,648
Professor P Matthews	1	636,352
Professor R Eastell	1	187,380
Professor T Trembath	1	1,584,232
Professor S H Gillespie	1	639,900
Professor S Johnston	4	2,702,244
Professor S L Rowland-Jones	3	385,504
Professor T Peters	1	3,754,798
Professor T Robbins	1	2,008,036
Professor V T Farewell	2	420,648

None of the above was involved in the approval of these awards. In addition, the MRC made the following aggregate awards to institutions where senior members of staff are also MRC's Council, board and committee members.

Related Party	Institution	Number of awards	Aggregate amount (£)
Professor G W G Wilkinson Professor J Williams Professor K Fox	Cardiff University	6	4,845,565
Professor C Ison	Health Protection Agency	1	153,109
Professor F Gotch Professor C Kennard Professor D Brooks Professor G R Screation Professor M A Ritter Professor M Wilkins Professor G Garnett Professor G Smith Professor C Pusey Professor D J Balding Professor M J Dallman Professor P Elliott Professor S Johnston Profsir A W Darzi	Imperial College of Science Tech and Med	33	20,446,825
Professor D Barford Professor P W J Rigby	Institute of Cancer Research	1	799,136
Professor D Armstrong Professor M Yianneskis Professor P Doherty Professor R J Morris Professor R Trembath Professor G Richardson Professor S Amiel	King's College London	26	24,061,519
Dr S C Anderson Professor D Leon Professor H Dockrell Professor J Cairns Professor J Whittaker Professor K Mulholland Professor K Wellings Professor R Hayes	London School of Hygiene and Tropical Medicine	7	3,223,343
Professor J Gribben Professor A Clark Professor N Lemoine	Queen Mary and Westfield College/LHMC/Barts	10	3,332,828
Professor G P Reynolds Professor P Johnston	Queen's University Belfast	5	1,800,881
Professor M P Cranage	St George's, University of London	3	641,310
Professor M Newell Professor D Goldblatt Professor A Bowling Professor A H Schapira Professor A N Phillips Professor C A Sabin Dr A J Bain Professor Power Professor A Copp Professor D Jones Professor C Dezateux Professor G J Hart Professor J Stephenson Professor M Fitzgerald Professor R Raine	University College London	42	25,090,375

Related Party	Institution	Number of awards	Aggregate amount (£)
Professor S Caddick (cont) Professor S H Gillespie Professor V Walsh Professor W D Richardson Professor X Lu			
Professor M Campbell	University of Aberdeen	4	1,433,565
Professor E Jenkinson Professor L E Macaskie Professor L Piddock Professor L S Young Professor Michael Wakelam Professor P Moss Professor P Johnson Professor P M Stewart Professor R Lilford	University of Birmingham	16	5,478,669
Professor J L Donovan Professor David Nutt Professor Paul Martin Professor D Sharp Professor J M Tavaré Professor M J Miles Professor T Peters	University of Bristol	9	5,780,110
Dr A Ferguson-Smith Dr J Clarke Dr S Efstathiou Professor C French-Constant Professor J P Luzio Professor M J Brown Professor S Sutton Professor Barbara Sahakian Professor T Robbins	University of Cambridge	25	18,939,865
Professor C Watts Professor J J Belch Professor M Chaplain	University of Dundee	5	2,370,986
Professor I M Harvey	University of East Anglia	2	4,062,955
Professor C Haslett Professor D J Finnegan Professor D J Price Dr P Warner Professor P Sandercock Professor G D Murray Professor J Savill Professor M Shipston Professor P Ghazal	University of Edinburgh	25	18,412,038
Dr J M Cooper Dr M Girolami Dr M Petticrew Professor I A Greer Professor G Graham Professor I B McInnes Professor J Pell	University of Glasgow	12	7,972,873
Professor P J Diggle	University of Lancaster	1	395,629
Dr J Colyer Professor D Bonthron	University of Leeds	8	4,086,537

Related Party	Institution	Number of awards	Aggregate amount (£)
Professor D R Jones Professor P Burton Professor S Nahorski	University of Leicester	10	5,870,575
Professor A Jacoby Professor P Salmon Professor B K Park Professor T Walley	University of Liverpool	5	1,261,057
Dr M Rattray Dr S Panzeri Professor A North Professor A Silman Professor C Kielty Professor C Streuli Professor G Dunn Professor N Rothwell Professor S Lewis	University of Manchester	14	6,038,832
Professor C Donaldson Professor C P Day Professor S Marshall Professor J C Mathers Professor M P Eccles	University of Newcastle-upon-Tyne	9	3,586,798
Professor D Ala Aldeen Professor J Thornton Professor S J B Tandler Professor H Sewell Professor I Hall Professor S J Hill Professor Y Mahida	University of Nottingham	9	2,303,524
Dr A J Fairbanks Professor A Hill Professor A Vincent Professor A J McMichael Professor E Sim Professor E Y Jones Professor F Powrie Professor H Watkins Professor J R Geddes Professor K Davies Professor M I McCarthy Professor R E Phillips Prof/sir M Brady	University of Oxford	28	20,590,182
Dr W S Barclay Professor D C Berry	University of Reading	5	3,510,310
Professor D C Crossman Professor J Brazier Professor P Andrews Professor R Eastell	University of Sheffield	6	3,107,655
Professor J Nicoll Professor R Peveler Professor P Little Professor S T Holgate	University of Southampton	4	457,055
Professor V Brown	University of St Andrews	1	617,830
Professor A Carr Professor J Cohen	University of Sussex	4	4,384,671

Related Party	Institution	Number of awards	Aggregate amount (£)
Professor M A McCrae Professor S Weich	University of Warwick	4	2,703,217
Professor E Roman Professor Deborah Smith Professor N Cullum Professor S E Gathercole	University of York	2	700,350

28. Financial instruments

FRS13, *Derivatives and Other Financial Instruments*, requires disclosure of the role which financial instruments have had during the period in creating or changing the risks a body faces in undertaking its activities. Because of the largely non-trading nature of its activities and the way it is financed, the MRC is not exposed to the degree of financial risk faced by businesses. Moreover, financial instruments play a much more limited role in creating or changing risk than would be typical of the listed companies to which FRS13 mainly applies. The MRC has limited powers to borrow or invest funds; financial assets and liabilities are generated by day-to-day operational activities and are not held to change the risks facing the MRC in undertaking its activities.

Liquidity risk

The MRC's net revenue resource requirements are largely funded by the grant-in-aid from its sponsor department. The capital expenditure is also financed through the grant-in-aid. The MRC is therefore not exposed to significant liquidity risks.

Interest rate risk

The MRC is not exposed to any interest rate risk.

Foreign currency risk

The MRC maintains US dollar and Euro bank accounts in order to deal with day-to-day transactions. There is a risk attached to holding foreign currency denominations but this is not considered to be material.

The MRC also holds certain balances in overseas bank accounts to help manage day-to-day business transactions of its overseas operations. During the year ended, the average monthly float levels were £950,000. (2005/06 = £900,000).

29. Post balance sheet events

In July 2007 DIUS notified the MRC that the Commercial Fund should be accounted for within the Government's Resource and Accounting Budgeting Framework, that £92m of the £198.9m accumulated cash surplus should be paid into the Government's Consolidated Fund, and that this £92m would no longer be available for the MRC's use. The MRC has been informed that the remaining balance of £106.9m has been added to its stock of EYF. Drawdown of this EYF will be subject to the normal processes including approval from DIUS. The MRC is still in discussion with DIUS over the implications of this change.

There were no other post balance sheet events between the balance sheet date and 13 December, the date the Accounting Officer dispatched the accounts to the Department for Innovation Universities and Skills. The financial statements do not reflect events after this date.

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