A PET scan image of a human torso, showing metabolic activity in various organs. The image is color-coded, with yellow and red indicating high metabolic activity, and blue and green indicating lower activity. The spine is visible in the center, and the lungs are on either side. The text 'MRC Medical Research Council' is in the top right corner, and the title 'Medical Research Council Annual Report and Accounts 2010/2011' is at the bottom.

MRC

Medical
Research
Council

**Medical Research Council
Annual Report
and Accounts
2010/2011**

Medical Research Council Annual Report and Accounts 2010/2011

Presented to Parliament pursuant to Paragraph 2 (2) and 3 (3) of Schedule 1 of the Science and Technology Act 1965.

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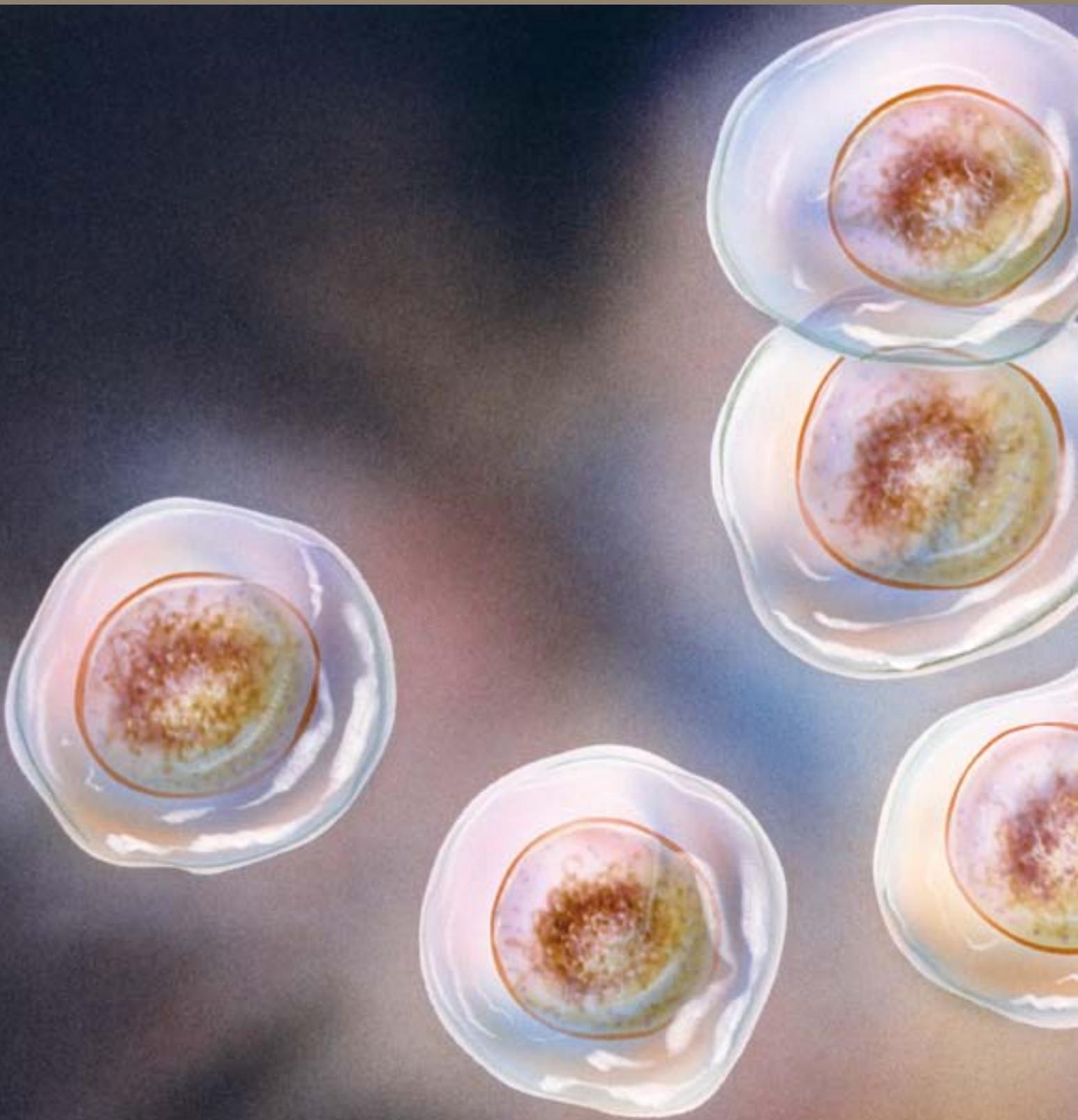
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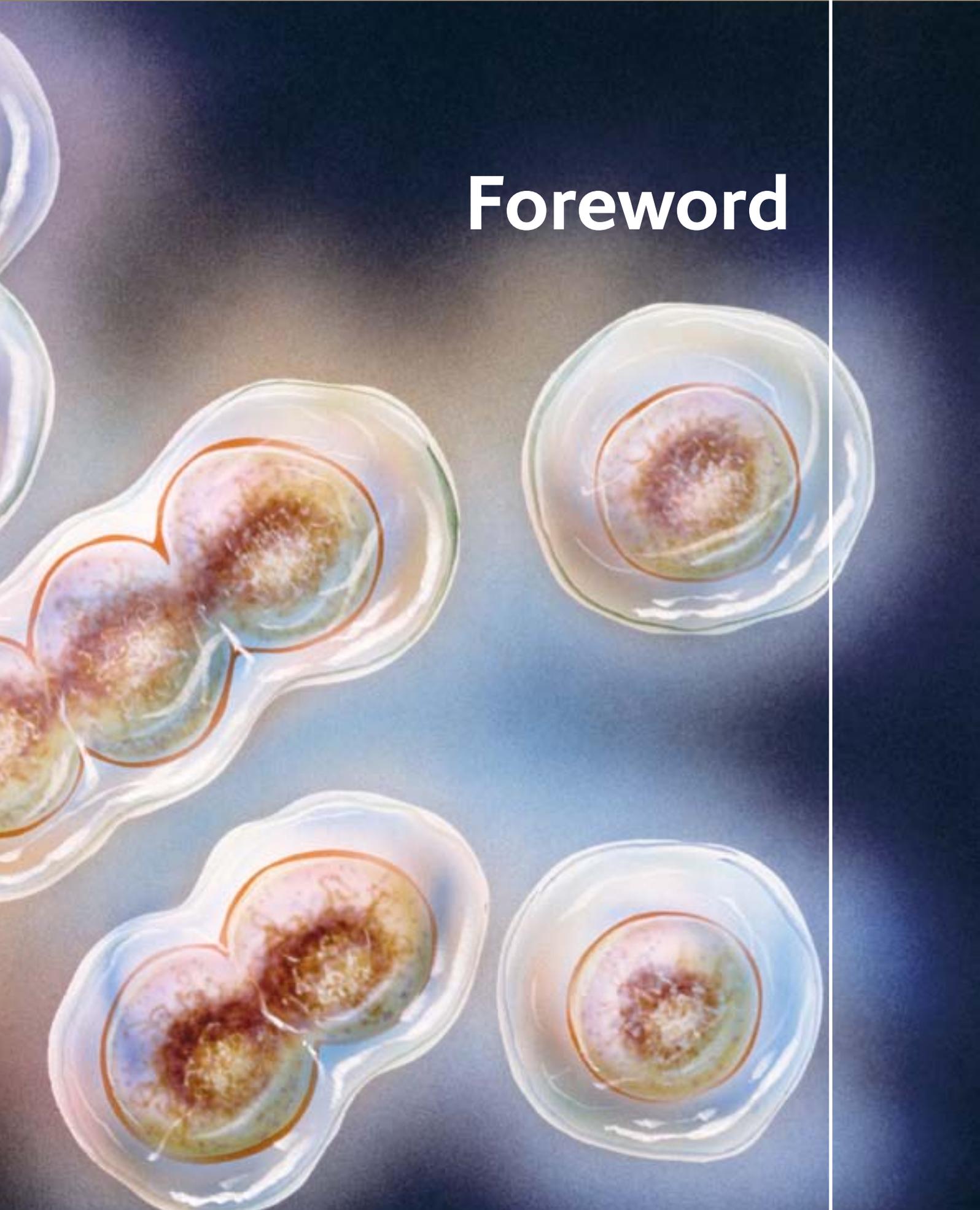
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Chlamydia bacteria
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Foreword



Foreword from the Chief Executive and Chairman



Sir John Chisholm,
Chairman

2010/11 has been a year of change, not least for the Medical Research Council. The 2010 General Election brought in the first Coalition Government in recent times with an urgent agenda to tackle the country's deficit. Closer to home, we have a new chief executive, new Head Office locations and new back-office systems. Furthermore, we have introduced some innovative models of funding for both basic and translational biomedical research.

While these changes certainly brought many challenges, they also represented opportunities for the MRC to reflect on our work and examine the best ways to push forward with our mission of funding world-class research to improve the health and wealth of the UK.

In May 2010, the new Government announced it would undertake a full spending review. Funding for the NHS and international aid was ring-fenced – both areas relevant to the MRC's work, of course, bearing in mind our relationship with the NHS and, in global health research, with the Department for International Development. However, the budget for the Department for Business, Innovation and Skills (BIS), which sponsors all seven of the UK's research councils, was not ring-fenced and the review represented a risk to the MRC's funding.

Working with Research Councils UK, the MRC was able to show that scientific progress is a significant driver of economic growth, alongside the more direct benefits of better medicines, therapies and prevention of disease. This evidence was recognised by the Government, which committed to maintain the overall science budget in cash terms over the four years of the new spending review period – and although this was equivalent to a nine per cent cut in real terms, it was better than many had feared. Helpfully for university research funding, in the same settlement the quality-related research funding from the Higher Education Funding Council for England was ring-fenced.

In the allocations of the science budget which followed in December 2010, the MRC's science and research resource budget – our day-to-day spend on science – was maintained in real terms over the four-year period up to 2014/15. This was possible for a number of reasons: the MRC regained authority to re-invest income derived from the commercialisation of intellectual property; our administration budget and our capital budget for investing in buildings, equipment and IT were significantly reduced; and we committed to making efficiency savings that could be re-invested in our scientific research programmes.

This settlement enables the MRC to maintain the strength of medical research in the UK, whether discovery science or translational research, and to increase the impact of our work on public policy and the economy. In our Delivery Plan for 2011/12 to 2014/15, we set out some of the major priorities and commitments that we expect will deliver real gains in health and wellbeing in this timeframe.

These include the growing field of stratified medicine, which allows researchers to understand better the causes of complex diseases and thereby tailor treatments and interventions to specific groups of patients. We will also focus on regenerative medicine, which includes stem cell therapies and other ways of repairing lost or damaged tissues in the body, research into addiction and research into healthy ageing. The MRC will continue to work in close partnership with the Technology Strategy Board (TSB), the National Institute for Health Research (NIHR) and other research councils in these areas.

Ensuring that discoveries made are developed into new treatments or changes in medical practice is enormously important to the MRC. We will continue to work hard to accelerate the process of translation, working with industry, the health departments and other stakeholders to ensure any barriers to innovation and collaboration are removed, while maintaining appropriate levels of regulation.

It was in this vein that we developed, with the Association of the British Pharmaceutical Industry, a new initiative in inflammation and immunology (see page 42). What began as a workshop for academic and industrial scientists quickly showed promise as an effective way of identifying the challenges, barriers and opportunities for collaboration in specific disease areas. The MRC invested £9.5 million as a result, and we are looking to apply this model in other areas, such as obesity and diabetes, in the future.

Our MRC Industry Collaboration Awards (see page 36) encourage interaction between academia and industry. This flexible scheme sets out the framework for collaboration between commercial and academic partners, upfront, as part of the grant application. It allows the MRC to fund innovative

projects that include private sector partners across all relevant industry sectors: pharmaceuticals, biotechnology, diagnostics and devices.

The MRC is working closely with the TSB and the other research councils to coordinate our approaches to working with industry. For example, the MRC's Pharma Forum has adopted a new format to include the TSB, the Biotechnology and Biological Sciences Research Council (BBSRC) and the Engineering and Physical Sciences Research Council (EPSRC), providing a platform for consistent and effective engagement with industrial partners.

We have continued to develop a new model of research investment to complement our research institutes, units and centres. The new model is the 'university unit' (see page 60), similar to our intramural units but where the staff are university employees. This model recognises that universities have matured enormously in research capability and it is now often more efficient to make use of the university infrastructure than to supply those services from the MRC. In April 2010, the first two university units were formed by the transfer of two intramural units to the University of Oxford. Further MRC units are now en-route to transferring to university unit status and it is possible that, in the future, new university units may be specially created. Although directors and staff of MRC university units are university employees, they are still subject to the same five-yearly review process as other MRC research establishments.

Finally, in October 2010, we welcomed Professor Sir John Savill as our new chief executive, taking over from Sir Leszek Borysiewicz. Borys has done a transformational job in his three years as chief executive and I owe him special thanks for his tireless endeavour and his courage in taking on challenges. It is a testament to both Borys and

John that, despite the tumultuous times, including the relocation of Head Office within London and to Swindon, the handover was incredibly smooth and the MRC lost no ground in our constant efforts to innovate and improve the ways in which we fund the best medical research.

Sir John Chisholm, Chairman



Professor Sir John Savill
Chief Executive

My relationship with the MRC began with a clinical training fellowship that transformed my career. Later, I was a member of the MRC's Council and chair of two research boards. So I knew what I was committing to when I rejoined the MRC as chief executive, and I thank Borys for his sterling work that left the MRC in such good shape when I started in October. I came back to a thriving organisation with a clear sense of direction laid out in the 2009-2014 Strategic Plan – these factors helped us to secure a relatively strong spending review settlement in the autumn.

The prospects for medical research in the UK are bright and it is right that the MRC should be at the forefront, working in partnership across public and private sectors, with universities, companies, charities and governments, and with organisations across the world to beat disease. We are seizing the initiative, introducing creative, flexible ways of funding excellent science at all stages from basic discovery to clinical development, from growing fields like stratified medicine to powerful population-based research. Just as we are innovating in our funding models and the new university units, we are developing the ways we support the next generation of researchers. This year we have decided to extend our senior non-clinical fellowships from five years to seven. We have introduced a new degree of flexibility in the way we support new investigators looking for their first MRC grant so that we can encourage those with potential and nurture the medical research leaders of the future.

MRC funding is about more than just money. Whether it is young researchers starting out, clinicians developing a research interest, academics pursuing fruitful collaborations with industry or world-class scientists in UK universities and MRC institutes, units and centres, we are supporting the people whose science will transform medicine. The MRC is approaching its hundredth year of pioneering medical research: I'm proud to think that we are now laying the foundations for another hundred years.

Professor Sir John Savill, Chief Executive



Nerve cell
© Pasieka/Science Photo Library 2011

The MRC in 2010/11



The MRC in 2010/11

Introduction

The MRC is a publicly-funded organisation dedicated to improving human health. We support research across the entire spectrum of medical sciences, in universities and hospitals, in our own research units and institutes across the UK and in our research units in Africa.

The heart of our mission is to improve human health through world-class medical research. To achieve this, we support research across the biomedical spectrum, from fundamental laboratory-based science to clinical trials, in all major disease areas. We work closely with key stakeholders and other research funders in the UK and internationally to deliver our mission, prioritising research that is likely to make a real difference to clinical practice and the health of the

population. Our stakeholders include the UK's health departments and other government departments and agencies, the six other research councils, industry and the academic and charity sectors.

Established in 1913 and incorporated by Royal Charter in 1920, the MRC's mission is to:

- encourage and support research to improve human health,
- produce skilled researchers,
- advance and disseminate knowledge and technology to improve the quality of life and economic competitiveness of the UK, and
- promote dialogue with the public about medical research.

The MRC's Council

The MRC's Council directs and oversees corporate policy and scientific strategy, ensures the organisation is managed effectively and makes major policy and spending decisions. Council members share collective responsibility for its actions and performance. Responsibility for implementing the Council's strategy and decisions is delegated to the chief executive.

Sir John Chisholm, Chairman

Professor Sir John Savill,
Deputy Chair⁽¹⁾

Sir Leszek Borysiewicz
Deputy Chair⁽²⁾

Professor Jeffrey Almond
Sanofi Pasteur, France

Professor Michael Arthur
University of Leeds

Mr Tony Caplin
*Northwest London Hospitals
NHS Trust*

Professor Dame Sally Davies
Department of Health, England

Professor Chris Day⁽³⁾
Newcastle University

Dr Annette Doherty
*Pfizer Worldwide Research and
Development, USA*

Dr Richard Henderson
*MRC Laboratory of Molecular
Biology, Cambridge*

Professor Dame Sally Macintyre
*MRC Social and Public Health
Sciences Unit, Glasgow*

Ms Vivienne Parry
Writer and broadcaster, London

Lord Naren Patel
House of Lords, London

Professor Michael Schneider
Imperial College London

Professor Herb Sewell⁽⁴⁾
University of Nottingham

Mr John Neilson, Observer⁽⁵⁾
*Department for Business,
Innovation and Skills, London*

⁽¹⁾ Appointment commenced 1 October 2010. ⁽²⁾ Appointment ended 30 September 2010.

⁽³⁾ Appointment commenced 1 April 2010. ⁽⁴⁾ Appointment ended 31 March 2011. ⁽⁵⁾ Last meeting 23 March 2011

This Annual Report to Parliament describes our progress in meeting our aims and objectives between 1 April 2010 and 31 March 2011. It highlights key initiatives and partnerships and outlines some of our plans for the future. Scientific achievements made during 2010/11 are highlighted in our online Annual Review and other publications available from the MRC website at www.mrc.ac.uk

The MRC receives its core funding allocation from the Department for Business, Innovation and Skills (BIS), in line with the Government's spending review cycle. We receive additional funding from other partners to take forward collaborative projects and joint initiatives which increase the impact of our work and the public funding we

receive. Our allocation for 2010/11 was agreed under the 2007 Comprehensive Spending Review and our plans for allocating these resources to deliver our mission in 2010/11 were outlined in our updated *Delivery Plan 2008/09 – 2010/11*.

In 2009, we published our five-year strategic plan, *Research Changes Lives*, which defined our role in contributing to faster and more effective ways for medical research to flourish at all stages: from working to understand the fundamental science of how our bodies work, to tackling some of the most pressing health issues facing society. We identified four Strategic Aims (see Box below) and this section of the Annual Report details our progress towards each of these aims during 2010/11.

MRC Strategic Aims, 2009-2014

- Picking research that delivers: setting research priorities which are most likely to deliver improved health outcomes (see page 26).
- Research to people: bringing the benefits of excellent research to all sections of society (see page 36).
- Going global: accelerating progress in international health research (see page 50).
- Supporting scientists: sustaining a robust and flourishing environment for world-class medical research (see page 56).

Facts and figures

The MRC's gross research expenditure in 2010/11 was £797.7 million. This support for world-class medical research to improve human health and enhance the economic competitiveness of the UK included:

- £288.7m on over 1,400 grants to researchers in universities, medical schools and research institutes
- £421.0m, including capital expenditure, on around 500 research programmes within the MRC's own units and institutes
- £78.7m on studentships and fellowships, including those in MRC's own units & institutes; there were around 1,900 postgraduate students and 370 post-doctoral in March 2011
- £17.8m for international subscriptions, which support the MRC's funding to international organisations and provide access for UK researchers to their resources

Figure 1: Estimated research programme expenditure by activity

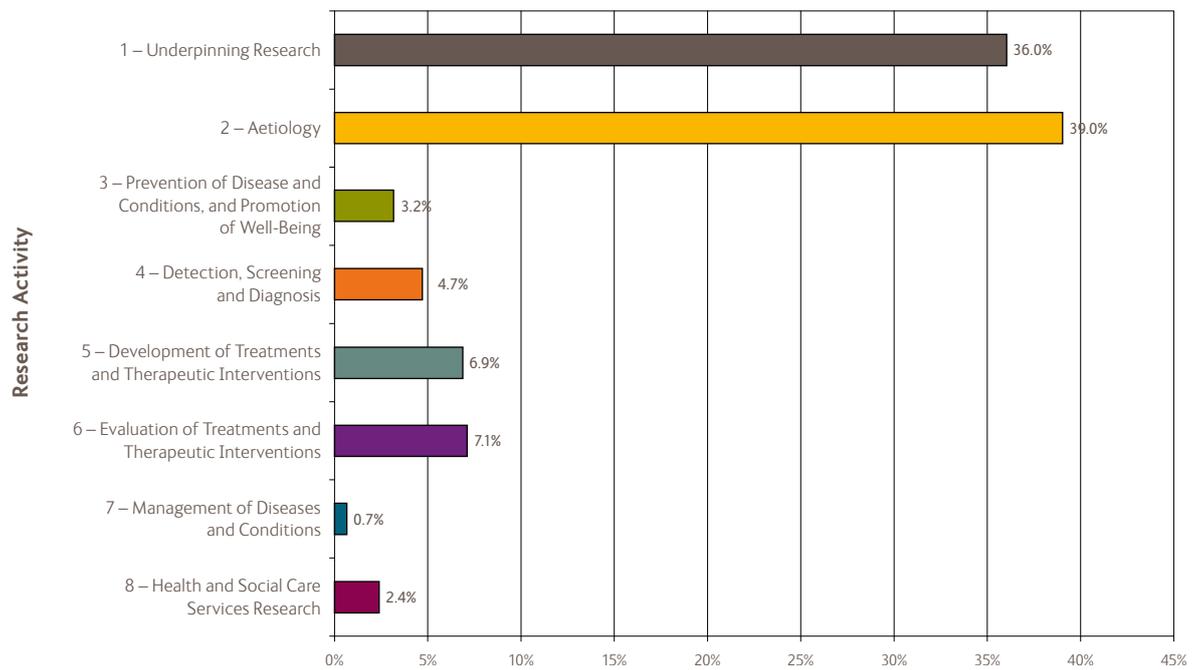


Figure 2: Estimated research programme expenditure by health category

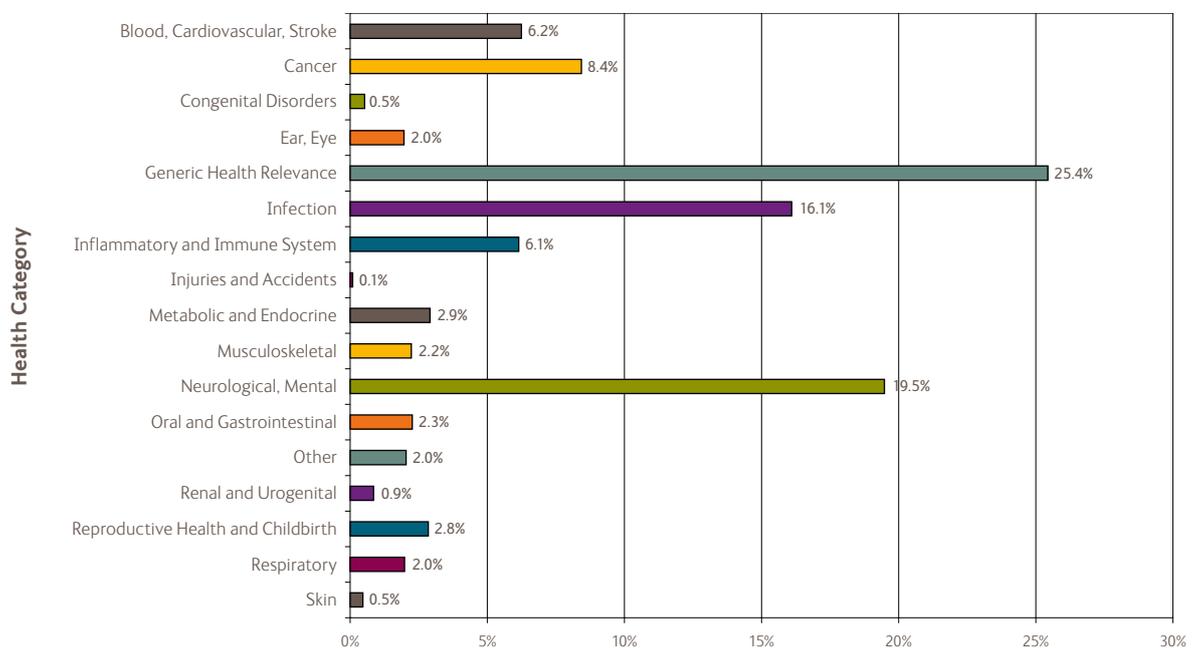
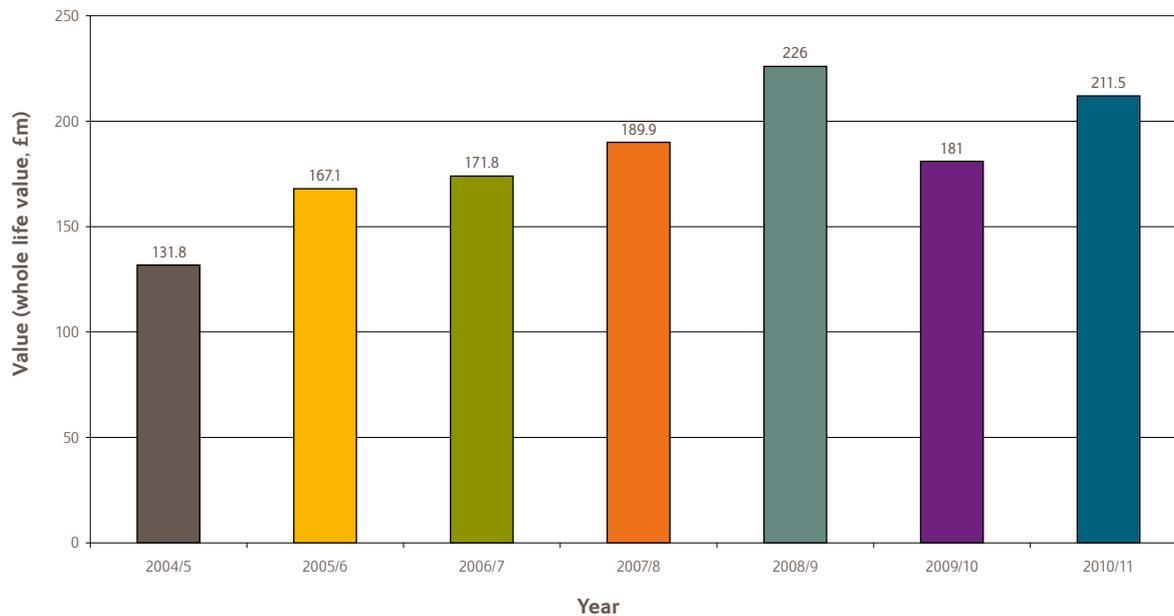
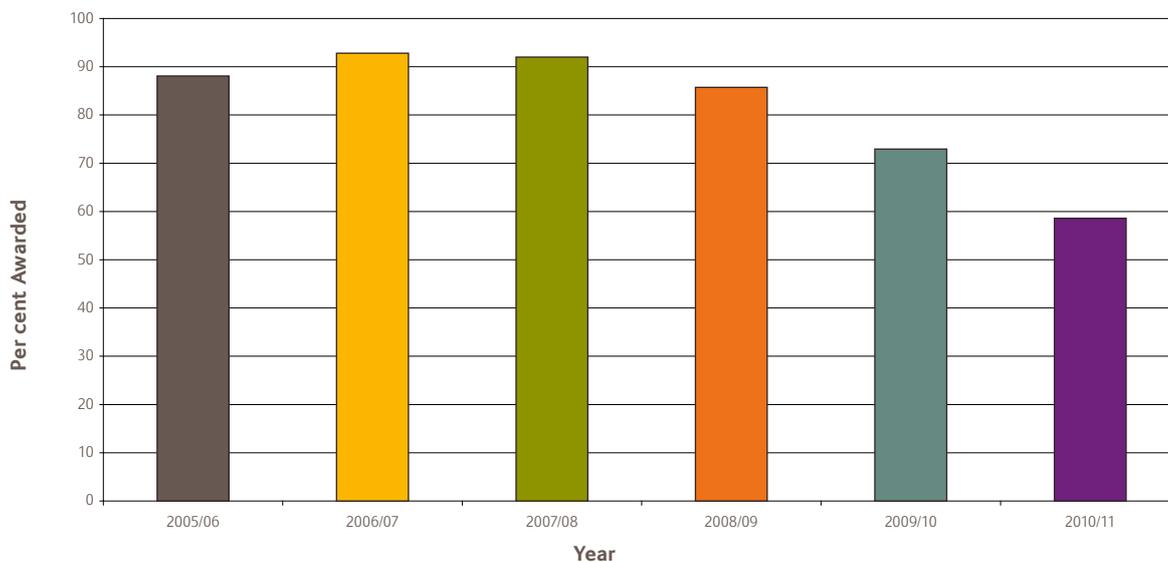


Figure 3: New grant commitment by financial year**Figure 4:** Success rate of internationally competitive grant applications*

* The success rate of internationally competitive grant applications fell in 2010/11, with fewer but higher value awards being made.

Institutes, units and centres

The MRC's large-scale investments include three institutes, 24 intramural units (including two research units in Africa), two university units and

27 centres. All institutes, units and centres are reviewed every five years (see Table 1, overleaf).

During 2010/11, MRC policies for supporting institutes, units and centres were reviewed and revised. In addition, the policies and principles for establishing university units and transferring intramural units to university units were defined. The main change when a unit transfers to a university unit is that the staff transfer from MRC employment to university employment. The aim of establishing or transferring units to university units is to achieve greater added value and improved efficiency. A University Unit Programme Board has been established to oversee all transfers to university units.

Changes initiated during 2010/11

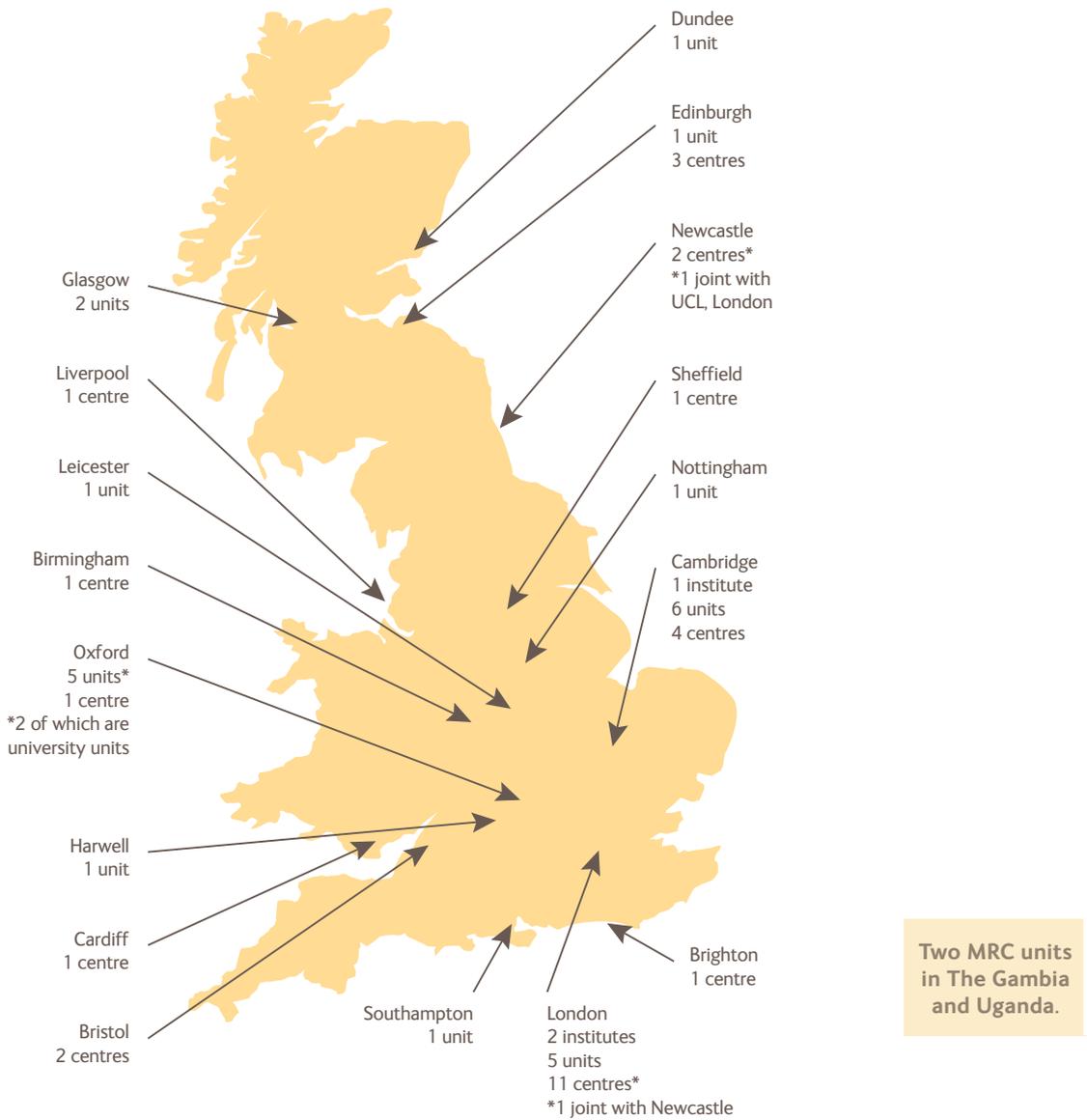
- Unit closures:
 - Human Reproductive Sciences Unit, Edinburgh – the unit was closed on 31 March 2011 (see page 31).
- General Practice Research Framework, University College London – the decision was made to close the unit in March 2012 (see page 60).
- Centre for Protein Engineering, Cambridge – the unit was closed on 30 September 2010.
- Three new MRC directors appointed to replace directors leaving or retiring:
 - Professor Vincenzo Cerundolo, director of the Human Immunology Unit, Oxford
 - Professor Susan Gathercole, director of the Cognition and Brain Sciences Unit, Cambridge
 - Professor Massimo Palmarini, director of the MRC-University of Glasgow Centre for Virus Research

Table 1: 2010/11 reviews of large-scale investments

	Total (as at 31/03/2011)	Reviewed	New starts	Change initiated	Closed
MRC institutes	3	1	0	0	0
MRC institute divisions*	12	9	0	0	0
MRC intramural units	24	5	0	2	2
MRC university units	2	0	2	0	0
MRC centres	27	3	0	3	0
Total	68	18	2	5	2

* Due to the breadth of science covered in MRC institutes, the science is initially reviewed division by division before the strategic review of the whole institute. A division is approximately the size of a large MRC unit.

Figure 5: The MRC's large-scale research investments as at 31 March 2011



Grant funding

Around 1,380 grant applications had a final decision during 2010/11: 242 awards were made, committing over £211m.

During 2010/11, all applications submitted to the MRC were acknowledged and applicants were provided

with guidance on the timetable for consideration; 100 per cent of applications submitted were considered by the MRC's peer review process within 26 weeks of submission. Feedback was provided on 97 per cent of grant applications within seven working days of a decision being made.

Table 2: Response mode application and success rate by number in 2010/11 (with 2009/10 figures for comparison)

Grant type	Number of applications		% success rate		Total amount awarded in 2010/11 (whole life values) £m
	2009/10	2010/11	2009/10	2010/11	
Centre Grant *	5	3	100	100	6.4
New Investigator Research Grant	146	123	17	12	6.1
Programme Grant**	53	83	32	57	80
Research Grant	1,191	1,168	17	15	119
Overall	1,395	1,377	21	18	211.5

* Renewals and invited full proposals only

** Full proposals after outline stage

Information about fellowship applications can be found on page 58.

Table 3: Targeted Calls, Areas and Panels 2010/11

Targeted calls (managed mode) applications by call scheme

Scheme name	Number of applications	Number of awards	Success rate %
African Research Leadership Scheme	12	3	25
Inflammation and Immunology Initiative	6	6	100
Lifelong Health and Wellbeing - Phase 3	81	17	21
UKCRC Translational Infection Research Initiative	2	1	50
Calls totals	101	27	27

Targeted areas (managed mode) applications by scheme

Developmental Clinical Studies (DCS)	30	8	27
MRC Industry Collaboration Awards (MICAs)	14	2	14
Targeted areas total	44	10	23

Targeted panels (managed mode) applications by call scheme

Developmental Pathway Funding Scheme (DPFS)	35	16	46
Methodology Research Panel (Investigator Led)	64	19	30
Translational Stem Cell Research Committee	11	7	64
Targeted panels total	110	42	38

Grand total	255	79	31
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The Medical Research Foundation

We continue to work in partnership with the trustees of the MRC's independently managed charity, the Medical Research Foundation. The public leave legacies and make donations to the MRC to support research and these funds are managed by the charity's trustees. During 2010/11 the MRC provided the trustees with scientific strategy, peer review and administrative support, and with this support, the trustees were able to grant 51 new awards amounting to over £3 million of charitable funds for research within the MRC's remit.

Measuring impact

To monitor progress against the MRC Strategic Plan and to understand better how MRC research leads to economic, academic and social impact, all MRC-funded researchers provide feedback on the impact of their work through an online system called MRC e-Val.

2010 was the second year that researchers used the system and more than 90 per cent of MRC researchers who had held any funding from the MRC since 2006 submitted information – more than 3,000 scientists. Analysis of the MRC e-Val dataset is yielding a detailed picture of the progress, productivity and quality of the science we support. In particular, it is highlighting how MRC research contributes to the development of new medicines, technologies and improvements to clinical policies and practices, and how MRC research encourages inward investment to the UK.

MRC-funded research carried out between 2006 and 2010 has contributed to:

- More than 40 new products and interventions in the process of being launched onto the market or in widespread use. This includes monoclonal antibodies licensed for nine

separate conditions (Benlysta®, for example, the first new treatment for lupus in 50 years).

- Obtaining over £300m of additional research funding for UK groups from sources either outside the UK or in the private sector.
- Publication of 300 patents, around 30 per cent of which have subsequently been licensed worldwide.
- Creation or expansion of 35 companies, creating hundreds of new jobs in the UK.

From the e-Val data, the MRC estimates that:

- 20 per cent of MRC principal investigators have had productive collaborations with the private sector over the last five years.
- MRC scientists currently actively collaborate with 250 unique industry partners worldwide.
- The average citation impact of research published by MRC-funded scientists is more than double the world average (see Box, overleaf).
- 11 per cent of staff supported from MRC funding find their next post in the private sector (approximately 100 per year).

Research publications

Publications are frequently used as a way to estimate the value or impact of research. The number of publications and their relative citation rates may be used as a quantitative measure of impact and quality.

A study commissioned by the Department for Business, Innovation and Skills in June 2009 called International Comparative Performance of the UK Research Base showed that the UK's relative research output in terms of its share of indexed publications was very strong in medical sciences. The UK share of publications was approximately 8.7 per cent in clinical sciences and 10.6 per cent in health sciences, putting this country second in the world behind the USA in both areas. The UK had over 14 per cent of the world's top 1 per cent of most highly cited papers, and was ranked first in the G8 on publication productivity, with almost 32 papers per \$billion Gross Domestic Product.

The MRC collected data through MRC e-Val in November and December 2010, at which time a total of 5,805 publications were reported for the calendar year 2010. Owing to the timing of data collection in MRC e-Val, the figures for 2010 do not represent the full year and will increase slightly. The data include 'Epubs ahead of print': research papers published electronically prior to being printed in a journal.

Table 4: Numbers of MRC research publications, calendar years 2006 to 2010

	2006	2007	2008	2009	2010	Total
Review	351	437	567	688	528	2,571
Article	2,923	3,732	4,374	4,951	5,059	21,039
Epub ahead of print	0	0	0	0	218	218
Total	3,274	4,169	4,941	5,639	5,805	23,828

Figure 6: Numbers of MRC research publications, calendar years 2006 to 2010

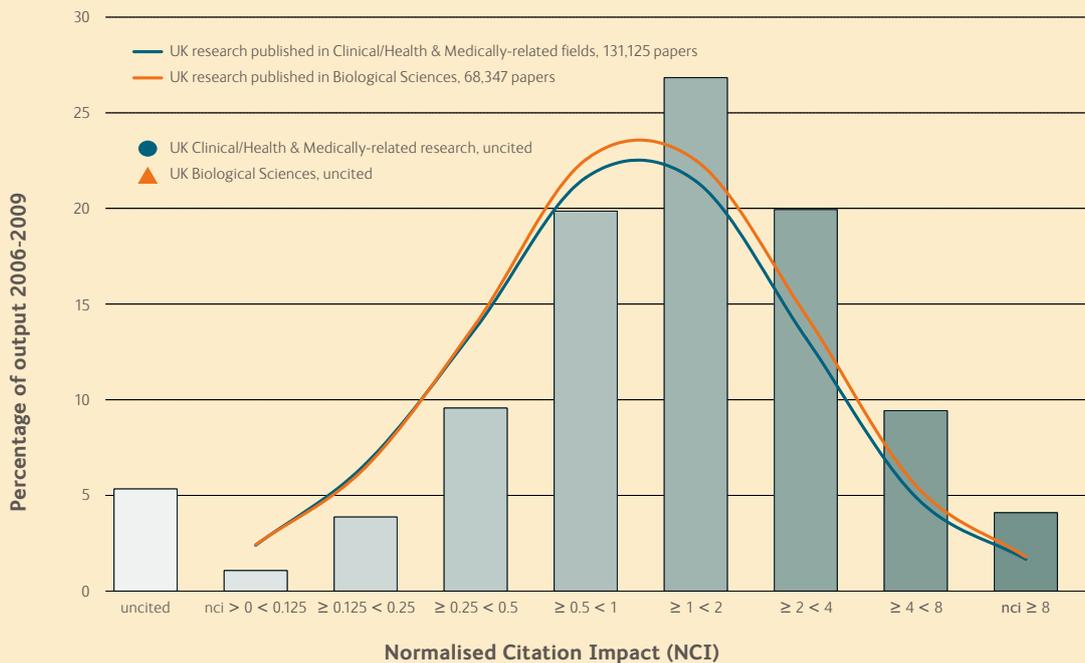


The MRC has obtained citation scores for all of the publications reported from Thomson Reuters¹ and analysed these data using normalised citation impact (NCI) scores. The NCI is a count of citations normalised for scientific field and year. An NCI of 1 corresponds to the world average.

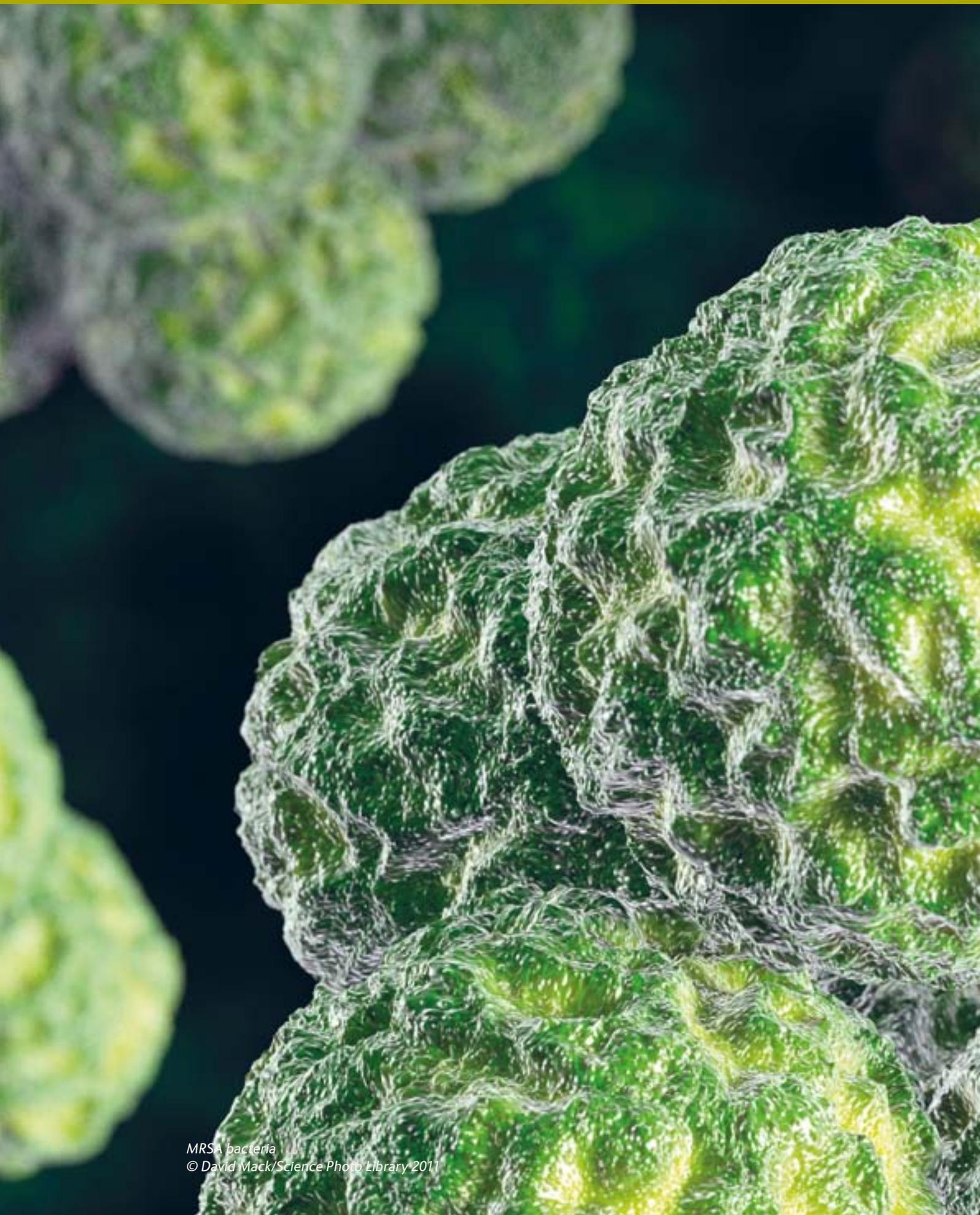
Using the publications reported in MRC e-Val for 2006-2009 and the NCI achieved by the end of 2010, MRC-attributed publications have an average NCI of over twice the world average.

NCI values are often presented as 'Impact Profiles[®]', which graphically represent how many papers fall into each of eight NCI intervals. The resulting distribution provides information on the proportion of highly cited papers, the proportion of papers with citation impacts above and below the world average, the proportion of uncited papers and the most common group. The Impact Profile[®] for the MRC can be seen in Figure 7, below, compared with profiles from all other UK papers in the fields of Biological Sciences and Clinical/Health and Medically-related research (data and analysis: Evidence, Thomson Reuters UK). For the UK in general, approximately 30 per cent of scientific papers are never cited. Research in the biomedical field fares better with 10 to 15 per cent of papers not cited in the period of our analysis, and for the MRC this is significantly lower (about 5 per cent). The profiles also show that, as well as MRC publications on average being more highly cited, there is a lower proportion of articles cited less than the world average and a higher proportion of highly cited articles.

Figure 7: 2010 citation profiles for papers published 2006-2009: MRC compared with UK research in relevant fields



1. http://thomsonreuters.com/products_services/science/science_products/scientific_research/research_evaluation_tools/essential_science_indicators/



MRSA bacteria
© David Mack/Science Photo Library 2011



1

Picking research that delivers

1. Picking research that delivers

The MRC Strategic Plan 2009-2014, *Research Changes Lives*, sets out our research priorities under two themes: Resilience, repair and replacement, and Living a long and healthy life. In 2010/11, the MRC continued to support world-class scientists working in fields relevant to these themes, as well as developing more specific policies and initiatives to bolster research in areas of need. These included the burgeoning field of regenerative medicine and proportionally under-funded diseases such as dementia.

Regenerative medicine

Regenerative medicine encompasses stem cell research and tissue engineering. It offers the potential for new therapies for many diseases that currently have no effective cure. Laboratory research has shown that stem cells have the capacity to grow into almost any other type of cell or tissue: the challenge is to translate this knowledge into new treatments.

The MRC leads on stem cell research on behalf of the Office for Strategic Coordination of Health Research (OSCHR) and its partners. Our aims are to give high priority to fundamental stem cell research, promote translation towards clinical applications, build further capacity in stem cell research and develop joint strategies with the Technology Strategy Board (TSB) and the National Institute for Health Research (NIHR) for academic and industry cooperation.

Support for basic stem cell research is delivered through response-mode funding by the MRC's research boards. Increased funding for translational research is being delivered through the MRC Translational Stem Cell Research Committee, which committed £5.5m in 2010/11 on six projects. In addition to funding in response mode, the committee has undertaken specific initiatives in the last three years to:

- Address preclinical barriers to the therapeutic use of stem cells.
- Support efforts to derive the UK's first clinical grade human embryonic stem cell lines.
- Develop partnerships between other national and international funders.

As well as providing resources for international collaborators, the MRC has worked with partners such as the California Institute for Regenerative Medicine (CIRM) to guide the development of the field. For example, an expert workshop run jointly by the MRC and CIRM in June 2010 assessed the state of global research in human somatic cell nuclear transfer research – a technique for producing pluripotent stem cells for research or cell therapy. Despite great strides made over the last 10 years, it is not yet technically possible to create human stem cells using this technique. The participants considered it could emerge as the technique of choice for creating pluripotent stem cells, however, and concluded that scientists should continue to work towards it.

In the UK, the MRC is working closely with the TSB, the Biotechnology and Biological Sciences Research Council (BBSRC), the Engineering and Physical Sciences Research Council (EPSRC) and the Economic and Social Research Council (ESRC) on a

joint Regenerative Medicine Programme to support a multidisciplinary research base and fund significant collaborations between academia and industry in areas ripe for pre-competitive development.

In addition to the Translational Stem Cell Research Committee, basic stem cell biology and the use of

stem cells in disease modelling and drug discovery remain underdeveloped areas and are a strategic priority for the MRC. For example, the UK Stem Cell Bank received £2.3m over three years, of which 15 per cent was from BBSRC, to support its repository of human embryonic, fetal and adult stem cell lines for use by researchers worldwide.

Trauma research

In January 2011, an award of £300,000 was made to the University of Birmingham to conduct research into trauma. The research will be national and, where appropriate, international, linking academic, clinical and military activities to improve understanding and treatment of trauma injuries and associated conditions.

Trauma is an area of significant clinical and scientific importance in both civilian healthcare and the military. However, the MRC has identified a need for more basic, translational and experimental medicine research in trauma. We are addressing this need first by supporting a series of workshops and pilot projects to increase activity, capability and coordination in trauma research. An important aspect is to encourage experts from relevant, non-trauma backgrounds, such as inflammation research, to collaborate with experienced trauma researchers.

Neurodegeneration and mental health

Neurodegeneration and mental health are strategic priorities for the MRC. Both areas have been supported through grant awards and strategic initiatives in 2010/11.

Neurodegeneration

Neurodegenerative diseases are incurable, debilitating conditions that result in progressive degeneration or death of nerve cells. They include dementias, Parkinson's disease, motor neuron disease and multiple sclerosis. It has been estimated that dementias alone cost the UK economy £17 bn a year. Following a Ministerial Summit on Dementia Research in 2009, a Ministerial Advisory Group was formed in 2010, complementing the work that the MRC already does coordinating strategic planning with

other funders. The Ministerial Group has a research prioritisation sub-group, which is led by the MRC and chaired by Professor Chris Kennard, head of clinical neurology at the University of Oxford and chair of the MRC Neurosciences and Mental Health Board.

Internationally, the MRC has joined forces with the German Centre for Neurodegenerative Diseases and the Canadian Institutes of Health Research in a new initiative to develop links between our respective centres of excellence in neurodegeneration research. The aim of the initiative, launched in June 2010, is to accelerate progress in understanding neurodegenerative diseases and help to identify new approaches for treatment. It will run for three years initially, each

agency committing £1m for collaborative research that will underpin future research in the area.

The immediate focus is to establish and adopt common methodologies and operating procedures, share research technologies, materials and resources, and enhance data sharing between the three centres.

In addition, the MRC is a leading partner in the development of a European strategy aimed at coordinating national efforts in neurodegeneration research, particularly Alzheimer's disease, across 25 EU member states. This is being conducted through a 'Joint Programming' approach which was formally launched in April 2010.

The ultimate goal of the Joint Programme on Neurodegenerative Disease (JPND) is to accelerate progress in understanding the causes of these conditions, leading not only to earlier diagnosis and the development of new treatments and preventive measures, but also to the provision of more effective medical and social care to improve the quality of life for patients and care-givers. During 2010/11, the JPND developed a strategic research agenda for neurodegenerative diseases encompassing basic, clinical and socioeconomic research. Implementation will follow through the proposal of innovative ways of pooling expertise and resources to address the fragmentation and duplication of current research efforts.

The JPND was a pilot for the European Commission, and its success has informed the development of nine subsequent Joint Programmes in research areas such as climate change, diet-related diseases and demographic change.

Mental health

Mental ill health is a huge social and economic burden on people and societies around the world. It is estimated to cost at least £77bn a year in England alone, where one in four people is affected by a mental health disorder at some stage in their life. In May 2010, the MRC published a comprehensive review of mental health research in the UK. It was undertaken in order to advise OSCHR and its funding partners on UK research priorities and opportunities for improving mental health.

While the UK has a strong track record in excellent mental health research, the MRC review identified many strategic opportunities to build on this work to meet urgent biological, psychosocial and public health needs. A number of recommendations were identified to be addressed by the UK research community in the next five to ten years, which set out the ambition to:

- Provide a greater focus on the prevention of mental disorders based on better understanding of causes, risk levels and new approaches to early interventions.
- Accelerate research and development to provide new, more effective treatments for mental illness, and to implement them more rapidly.

The MRC will concentrate on:

- Experimental medicine for mental health.
- Population-based approaches to identifying the risk factors for poor mental health and the determinants of mental wellbeing.
- Increasing the flow of trainees into mental health research and building human capacity.

Cross-research council programmes

Lifelong Health and Wellbeing

Life expectancy is rising in the UK and our population is ageing. It has been estimated that by 2051, one in four people in the UK will be over the age of 65, compared with only one in six today. Age is a major risk factor for disease and disability, putting increased pressure on public services, welfare, health and social care. The MRC's research priority theme, Living a long and healthy life, addresses the challenges and opportunities arising from an ageing population.

The majority of MRC spending in this area is through our funding boards and panels, coupled with strategic ageing research investments such as the MRC Lifecourse Epidemiology Unit (formerly the MRC Epidemiology Resource Centre) in Southampton, which will receive £14.6m over the next five years.

The MRC is leading Lifelong Health and Wellbeing (LLHW), a cross-research council programme. This targeted programme brings together a range of expertise to tackle collectively the ageing-related challenges that cut across different disciplines and sectors. LLHW is helping coordinate efforts to understand the factors that underpin and promote healthy ageing, with the aim of enabling people to maintain their health, independence and wellbeing throughout their lives.

Phase I of LLHW, in 2008, established three new centres in Edinburgh, London and Newcastle focusing on cognitive function, exercise and the ageing brain. Phases II (2009) and III (2010/11) have supported multidisciplinary research activities across a range of ageing topics, including pain, rehabilitation and healthy behaviours, through research 'collaboratives', networks, studentships, grants and pilot studies.

Ageing research remains a UK priority for investment and the MRC will continue to lead the LLHW programme in the period from 2011/12 to 2014/15. The MRC will invest more than £80m in strategic ageing-related research as part of an estimated £196m total spend by the research councils over the next four years.

The MRC leads on ageing research on behalf of the research councils and the OSCHR partners. We also collaborate with government departments, charities, industry and other stakeholders to support research aimed at improving health in older age, such as a £17m joint neurodegeneration initiative with the Wellcome Trust. In 2010, the MRC published a joint LLHW Strategy for collaborative ageing research in the UK to facilitate collaboration in ageing research between researchers, funders, industry, government, service providers and the public.

The LLHW strategy identified key challenges with opportunities for greater impact through cross-sector approaches and these priority areas will be addressed by LLHW over the next four years:

- Achieving good cognitive function and mental wellbeing in later life.
- Promoting physical health in older age.
- Extending healthy working lives.
- Enhancing mobility and independence in an ageing population.

Living with Environmental Change

Another cross-research council programme of significance to the MRC is Living with Environmental Change (LWEC). Together, the LWEC partners are identifying the most pressing economic and social challenges associated with environmental change and coordinating funding for multidisciplinary

research to respond to them. In a changing environment, medical research can provide information that helps protect people from diseases, pests and environmental hazards.

For example, following a workshop between funders, researchers and policy-makers, the MRC prioritised research into environmental exposures and health. An LWEC funding initiative committed £7m in 2010 to support four collaborative programmes to enhance capacity building, training and leadership in interdisciplinary and integrative environmental health research, such as the impact of airborne nanoparticles on health.

Also associated with LWEC is the £11m Environmental and Social Ecology Initiative (ESEI), which is establishing new interdisciplinary approaches to studying the ecology of infectious diseases. The way

that infectious diseases emerge, develop and spread is affected by natural and social environments. Of particular interest is how animal pathogens spill over into human populations and spread through communities in the UK and around the world.

Working with BBSRC, ESRC and the Natural Environment Research Council (NERC), the MRC awarded 12 'Catalyst' grants in March 2010 to enable research groups to develop interdisciplinary partnerships and research ideas in this area. In 2010/11, these groups were invited to apply for Research Consortium grants, along with a further eight groups whose applications for Catalyst grants had been considered to have ideas of great merit. The Research Consortium grants will fund high-quality, innovative and interdisciplinary research. Funding decisions will be made in July 2011.

Population sciences and public health

Research into infections is a strategic priority for the MRC, both in the UK and in developing countries. In addition to ESEI, the MRC leads the UK Clinical Research Collaboration's Translational Infection Research Initiative (TIRI). Phase II of TIRI was completed in 2010/11, awarding a total of £7.2m to two consortia: one developing tools to track transmission pathways of Methicillin-resistant *Staphylococcus aureus* (MRSA), the other combining diagnostic and communication technologies to reduce the burden of sexually transmitted infections.

TIRI was set up to encourage diverse research communities to form productive partnerships, combining their expertise to focus effort on research goals aimed at making a significant clinical and public health impact in researching public

health infections, antimicrobial resistance and diagnostics, and building capacity and training.

Also in this area, the MRC and the Canadian Institutes of Health Research Institute of Infection and Immunity (CIHR-III) issued a joint call in 2010/11, building on existing collaborations between the UK and Canada, for research consortia to tackle the serious global problem of antibiotic resistance. With resistance emerging as fast as new antibiotics come into use, and the spread of bacterial strains resistant to many or even all available drugs, there is an urgent need to improve our ability to detect and identify bacterial strains and to develop effective therapies and vaccines.

The MRC is contributing up to £2m – to be matched by CIHR-III – to support two consortia for four

years from April 2011, each consortium having team leaders from both the UK and Canada. It is expected that their work will significantly advance antibiotic resistance research along the translational pipeline to yield results of commercial and therapeutic value that will have an impact on clinical and public health.

Obesity

Tackling obesity and its related diseases is a national priority for the UK, where the morbidity and mortality associated with diet-related diseases are estimated to cause 70,000 excess deaths and cost the economy between £6.6bn and £7.4bn a year. Around 60 per cent of type 2 diabetes is attributable to excess body fat, and obesity is a risk factor for heart disease, certain types of cancer and other diseases. Obesity is rising throughout the world and there is an urgent need for improved prevention and treatment strategies.

The MRC currently spends around £15m a year on obesity research and another £10m on research with some relevance to obesity, such as cohort studies that look at obesity alongside many other health factors. Obesity is a complex socioeconomic issue influenced by numerous factors that can contribute to the 'obesogenic environment'. These factors often vary in nature and effect between different social groups but they include diet, eating habits and exercise or sedentary behaviour.

The MRC this year published a set of scientific priorities across the spectrum of obesity research in order to stimulate and coordinate research efforts. They focus on three scientific areas and five 'conceptual and experimental' approaches, which together offer the best chance of understanding, treating and preventing obesity and related diseases.

Given the importance of this issue, towards the end of the year, the MRC and the Wellcome

Trust began looking at opportunities for a new joint investment in obesity and metabolic disease and entered preliminary discussions with the University of Cambridge.

Addiction

Addiction and substance misuse is a major medical, social and economic issue for the UK. Problems caused by gambling and the misuse of alcohol and psychotropic drugs often have devastating effects on individuals, families and society more broadly.

The MRC leads on research into addiction in partnership with the ESRC on behalf of OSCHR. Our strategy has been developed with the aims of making better use of resources, building research capacity in the UK, increasing coordination, carrying out innovative interdisciplinary studies that will lead to improved public health, and taking a frontline position in the government drive to reduce the harm caused by alcohol, tobacco, illicit drugs and problem gambling.

The strategy is supported by a budget of £6.5m which has supported three funding calls so far. In 2009, eleven addiction research clusters were funded to develop networks and collaborations between researchers. At the beginning of 2010/11, four of these clusters were awarded grants totalling over £4.2m. These grants will support research into the physiological and environmental causes of addiction, the types of harm that addiction leads to and how they can be attenuated. New drugs to treat addiction and the modelling and evaluation of alcohol policy.

Reproductive health

On 31 March 2011, after nearly 40 years of world-class research, the MRC Human Reproductive Sciences Unit (HRSU) in Edinburgh closed. Originally formed as the MRC Reproductive Biology Unit in 1972, the unit's aims under its first director,

Professor Roger Short, were to develop improved contraceptives and to research the causes of infertility. It became an international leader in reproduction research and continued under the directorships of Professor Dennis Lincoln and then Professor Robert Millar, who joined the unit in 1999 and changed its name to HRSU.

MRC units are strategic investments established to meet distinct, important needs in medical research that cannot be fully addressed through grant funding. Although they represent a long-term commitment, they are not intended to be permanent fixtures in the research landscape: as research disciplines develop, different priorities arise, changing needs and the nature of the initiatives required to meet them. Guided by a bespoke international committee of independent scientific experts, the MRC reviews its units every five years to ensure they are meeting the competitive scientific quality threshold expected of them and that their model and level of investment remain appropriate.

HRSU was reviewed in 2010, taking into account the unit's proposed programme of work for the following five years, the needs of the field and the breadth of new opportunities that had developed in Edinburgh,

particularly on the Little France Medical Campus. The review concluded that the unit model was no longer the most effective mechanism for delivering high impact research in reproductive health.

The decision to close a unit is never taken lightly but the MRC's Council agreed that the time was ripe to evolve to a new model of funding. To help foster wider links between a core of high-quality key programmes and cutting edge science, including regenerative medicine, the MRC Centre for Reproductive Health was established.

The MRC Centre for Reproductive Health will attract less core funding from the MRC than HRSU did. However, it will include some of the excellent research that was underway at HRSU as well as encompassing wider collaborations across the university and with other partners. The MRC is already funding a significant amount of reproduction-related research at the University of Edinburgh through individual grants. The new centre is expected to build on these and the legacy of HRSU and link excellent ongoing research in stem cells, inflammation, developmental biology, hormonal disease and imaging.

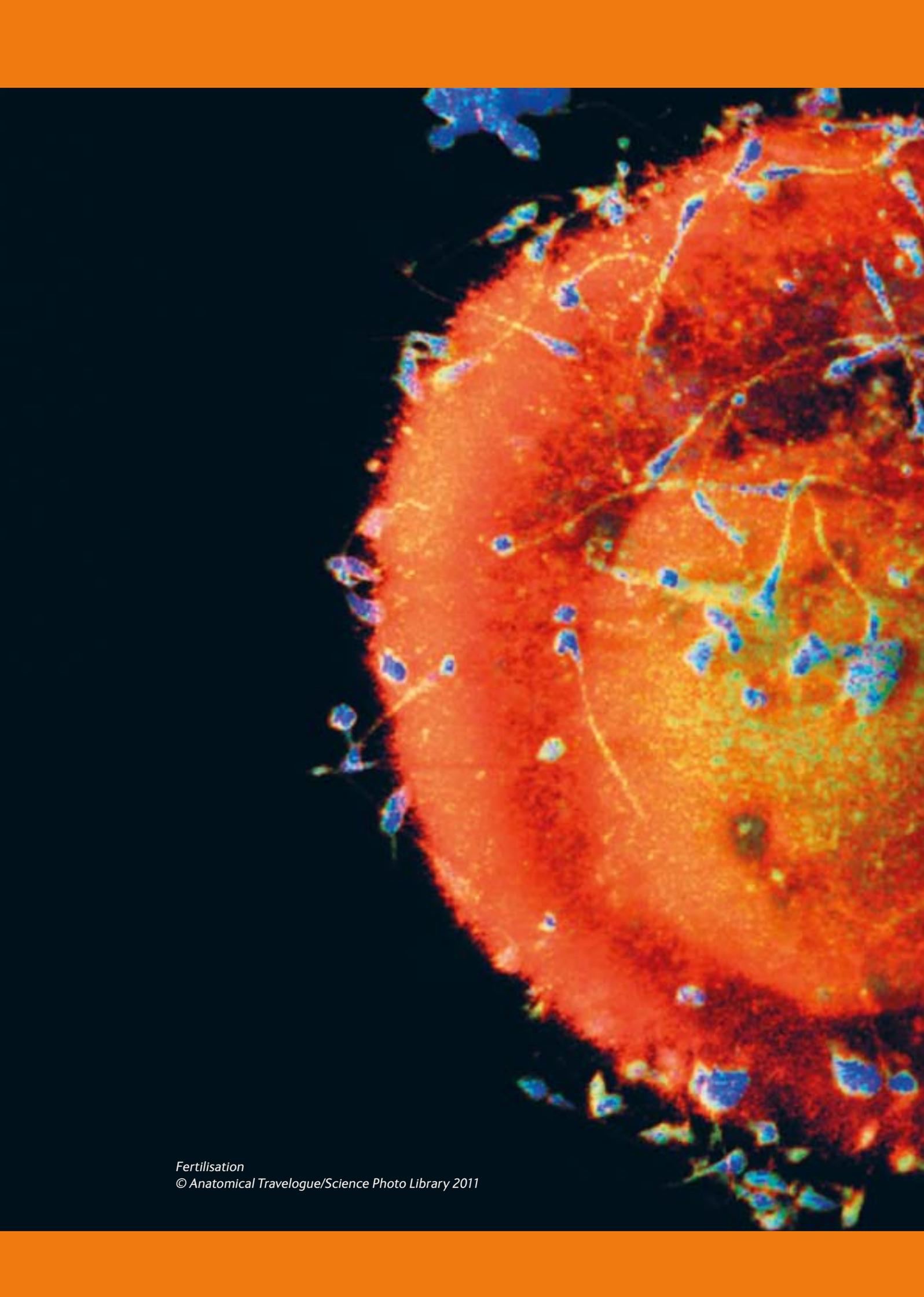
CFS/ME

Chronic Fatigue Syndrome/Myalgic Encephalomyelitis (CFS/ME) is a complex and serious debilitating medical condition with a diverse range of symptoms. Profound physical and/or mental fatigue is the best known, while others include pain, disturbed sleep patterns and gastrointestinal problems. CFS/ME affects around 250,000 people in the UK, each experiencing their own personal combination of symptoms.

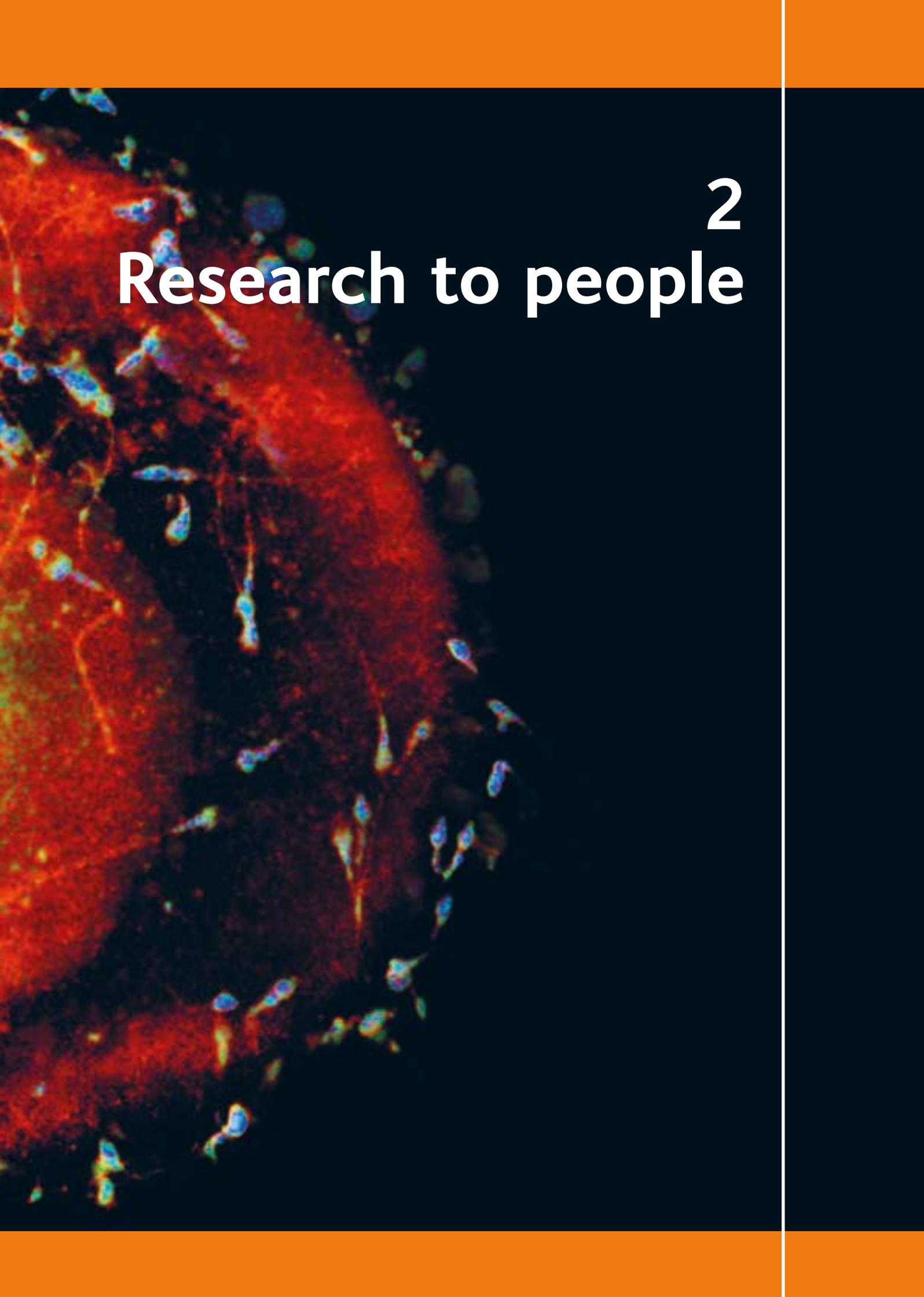
CFS/ME is a complex, heterogeneous condition that involves interaction between different, poorly understood mechanisms. Understanding these mechanistic pathways and the interactions between them is important in improving understanding of the condition. The MRC has been committed to funding research into CFS/ME for many years and the results of our research will help to guide future clinical practice.

In February 2011, we announced the results of the PACE (Pacing, graded Activity and Cognitive behaviour therapy: a randomised Evaluation) trial, also funded by the National Institute for Health Research, the Department for Work and Pensions and the Scottish Chief Scientist Office, which assessed the safety and effectiveness of various approaches to treating CFS/ME. PACE was the largest ever randomised trial of cognitive behaviour therapy (CBT) and graded exercise therapy (GET) for CFS/ME, following 641 patients for a year. The findings showed that CBT and GET were safe and effective treatments, but another treatment called adaptive pacing therapy was not effective.

Also in February 2011, the MRC announced a new funding call of up to £1.5m to support high-quality, innovative research that will increase the current knowledge base of CFS/ME and draw in expertise and resources from related research fields. The aim is to address and uncover the mechanisms underlying chronic changes related to CFS/ME.



Fertilisation
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A fluorescence microscopy image showing a biological sample, likely a tissue section, with red and blue staining. The red staining highlights a large, textured area on the left side, while the blue staining marks numerous small, individual cells or structures scattered throughout the field. The background is dark, making the stained elements stand out.

2

Research to people

2. Research to people

Medical research has great potential to generate knowledge and discoveries that can improve human health and deliver economic benefit. In recent years, it has become clear that the translation of research into positive social impacts can be improved and accelerated through focused, strategic initiatives.

The second aim in the MRC Strategic Plan 2009-2014 is bringing research to people, which encompasses the translation of research as well as communication, regulation, ethics, governance and working with decision-makers – all the activities that help realise the full benefits of research. A fundamental part of the MRC's mission is to ensure that the UK has the right mechanisms in place through which medical research can be translated, and that the research we fund is exploited wherever possible, in the most appropriate way, in order to realise its full potential.

Translation of research

The primary aim of the MRC's translational research strategy is to increase the scale and speed of progress from discovery into new clinical studies. As well as supporting the development of new treatments, procedures and other means of improving health from basic laboratory research, translational research is just as effective when bringing the fruits of clinical research back to the bench to inform the direction and application of basic research.

Since our strategy was introduced in 2008, it has clearly influenced the strategies of research-intensive universities and the future directions of the MRC's own institutes, units and centres. A positive response to our strategy, as demonstrated through widespread acceptance and a willingness to participate in its delivery, has been crucial to its success.

Under the auspices of the Office for Strategic Coordination of Health Research (OSCHR), the MRC leads on three major themes: experimental medicine, methodology and regenerative medicine. The National Institute for Health Research

(NIHR) leads on clinical evaluation and trials, and human capital is a jointly delivered theme. Our overarching approach has been to have an integrated framework of research funding schemes, infrastructure and facilities, allied with the support and development of highly trained individuals who are capable of delivering the translational research agenda across the full spectrum of activities undertaken by the MRC, NIHR and others.

It is the nature of translational research that its success will usually be dependent on strong, productive interactions between researchers in the public sector and industry scientists. The MRC has established a flexible scheme to promote and facilitate collaboration between academics and industry. Whereas businesses are not eligible for MRC funding, the MRC Industry Collaboration Award (MICA) enables partnerships between academic groups and relevant companies to apply for funding through other MRC schemes. Up to 31 March 2011, 25 MICA applications have been awarded funding, including six in 2010/11. Thirteen of these projects

received funding through the Developmental Pathway Funding Scheme (DPFS) (see below).

The 'managed programme'

Central to the MRC's translational research strategy are funding streams to support preclinical and clinical development through to the early stages of evaluation in clinical trials. Together, the DPFS and the Developmental Clinical Studies (DCS) funding streams make up the MRC's 'managed programme' of translational research, supporting research from discovery all the way to early evaluation in people. Research developing and evaluating new stem cell therapies is managed through a separate Translational Stem Cell Research Committee (see page 26).

Developmental Pathway Funding Scheme

Since its launch in 2008, over 50 different higher education institutions have applied for DPFS funding. At 31 March 2011, there were 86 projects in progress, representing a commitment of £31.4 million. Of these, 21 grants were awarded in 2010/11, totalling about £12m.

These numbers include projects that are being managed locally by universities through a pilot 'devolved portfolio' approach. The MRC selected a small number of universities – Dundee, Edinburgh, Nottingham, King's College London and a partnership between the Universities of Bristol and Cardiff called SARTRE – that were given £2m each to support translational research in their institutions in 2009/10 and 2010/11. We are currently evaluating this approach, but the participating universities are enthusiastic and have already indicated that it has substantially enhanced their ability to support translational research.

Examples of studies supported by the DPFS include:

- Early development of a drug to treat multiple myeloma, working through a novel approach to tackling this form of cancer.
- Validating a new diagnostic marker of myocardial infarction.
- Identification and early development of compounds to treat parasitic diseases such as malaria, leishmaniasis and trypanosomiasis.
- Development of a catheter with antimicrobial coatings to reduce the incidence of catheter-acquired infections.

Developmental Clinical Studies

The developmental stage after DPFS will usually be exploratory 'first in man' studies and early-stage clinical trials, supported by the MRC through DCS awards. Such research is one aspect of experimental medicine, which the MRC also supports through its research boards. The DCS scheme supports experimental medicine studies that are goal-oriented and milestone-driven. Experimental medicine studies supported through the boards are usually hypothesis-driven discovery studies aimed at gaining a deeper understanding of disease mechanisms.

The DCS scheme made 10 awards in 2010/11, totalling around £14m.

Examples of studies being supported through DCS include:

- Clinical evaluation of a new treatment to reduce inflammation following subarachnoid haemorrhage.
- Investigating the potential therapeutic benefits of a new approach to treating myocardial infarction.
- Phase I studies on an analogue of peptide YY as a treatment for obesity.

PET imaging-based research

Modern imaging technology allows the study of disease processes in fine detail, including measuring the action of medicines in human organs such as the brain and heart. Positron emission tomography (PET) imaging is already widely used in the diagnosis of cancer and is increasingly being used in research to develop new treatments in cancer, heart and brain disorders and inflammation. The MRC is working with the Medicines and Healthcare products Regulatory Agency (MHRA) and the National Cancer Research Institute to develop an enabling environment in the UK for PET-based research. Workshops and meetings with imaging researchers were held in 2010/11 and discussions are ongoing with an aim to develop better interfaces between researchers and the MHRA.

In a separate and unique partnership, the MRC, Imperial College London, King's College London and University College London will become equal shareholders in a newly created joint venture that assumes responsibility for the facilities and operations at the GlaxoSmithKline (GSK) Clinical Imaging Centre (CIC) at Hammersmith Hospital. An agreement signed in April 2011 will give the UK research community access to these world-class imaging resources, including PET.

Since opening in 2007, the £47m CIC has been used to carry out GSK-dedicated research, albeit in close

collaboration with academic researchers. Under the new arrangement, the centre will expand into new areas and applications of imaging, providing an outstanding opportunity to understand disease and therapy non-invasively. The new operating model was developed and delivered in cooperation with the Global Medical Excellence Cluster, a public-private partnership dedicated to building the UK's biomedical research capabilities.

Chemical biology

Chemical biology is a discipline that applies the tools and techniques of chemistry to the study and modification of biological systems. In 2010/11, it was identified by the MRC as an area with significant research challenges. To address these issues, a cross-research council workshop decided to co-fund five to eight networks to foster collaborations between academic researchers and industry organisations.

The funding, from the MRC, the Biotechnology and Biological Sciences Research Council (BBSRC) and the Engineering and Physical Sciences Research Council (EPSRC), will begin supporting the chemical biology networks from April 2011. It follows a joint highlight notice by the MRC and EPSRC and complements the MRC's own investments in the field, notably at the Laboratory of Molecular Biology (LMB) where the Protein and Nucleic Acid Division is planning to expand activities in chemical biology.

MRC Technology

MRC Technology (MRCT) is a key partner in our translational strategy. MRCT works to translate cutting-edge scientific discoveries into commercial products, focusing on intellectual property (IP) from research in the MRC's units and institutes. In 2010/11, licensing income from all sources reached £65.8m during the year (2009/10: £66.1m).

MRCT Centre for Therapeutics Discovery

The MRCT Centre for Therapeutics Discovery (CTD), which is accessible by the broader academic community, provides specialist translational infrastructure and expertise to support small molecule and antibody-based therapy development for MRC intramural and university projects funded by the DPFS grant scheme and other sources. During 2010/11, CTD received 110 project approaches (35 antibody, 75 small molecule) and 30 projects are currently underway.

Over the year, CTD has advanced a number of projects from basic research towards a clinical endpoint, including:

- Highly potent antibodies for potential use against multiple sclerosis and cancer.
- Potent and selective compounds that show promise *in vivo* against malaria.
- Potent inhibitors that could produce therapies for pre-term labour and cancer.

In July 2010, MRCT entered into an agreement with Genentech Inc, a wholly-owned member of the Roche group, for an exclusive licence to a series of small molecule drug candidates for the potential treatment of neurological disease. This is the first

small molecule chemistry programme to come out of CTD and the first major small molecule collaboration that the CTD has formed with an industry partner. Also in July 2010, MRCT and AstraZeneca entered into a strategic collaboration to share access to their collections of compounds to aid the search for potential new treatments for serious diseases.

MRCT Centre for Life Science Technologies

The laboratory-based activity within the MRCT facility in Edinburgh has been re-branded the Centre for Life Science Technologies, with the remit of sourcing early stage device and/or diagnostic projects where value can be added prior to partnering with a company able to develop a product. The most significant project to date has been the development of Optical Projection Tomography (OPT) technology. OPT was invented at the MRC Human Genetics Unit and is an imaging technology that allows the 3-dimensional construction of models of small tissue samples.

The MRC Development Gap Fund (DGF)

DGF is an innovative and successful MRC pre-seed fund managed by MRCT. It is designed to increase the commercial potential of MRC discoveries and intellectual property and is currently open to the intramural units and institutes of the MRC. It provides funding at the earliest stage of the drug discovery/technology pipeline to demonstrate proof of concept and the commercial potential of MRC research. In 2010/11, 10 new DGF projects were funded bringing the total number of approved projects to date to 90, of which 60 are complete.

Working with industry

Alignment with the life sciences industries in research, training and translational investment is at the heart of the MRC's strategy and delivery plan. We are committed to developing and sustaining close and productive partnerships with industry in the UK. We continually engage with the industry sector on determining our research strategy and its implementation for maximal effect. All of our research boards and many funding panels benefit from industry representation, ensuring strong input from the private sector.

Collaborations between industry and academia increase the knowledge base of therapeutic innovation and the pool of technologies available to both parties. At present, we fund collaborative research with more than 80 companies, ranging from large pharmaceutical companies to biosciences and healthcare companies. Notable successes include the GPCR-targeted drug spin-out Heptares and the lupus drug Benlysta[®]. Heptares was founded by scientists from the MRC LMB and Benlysta[®] was made possible by the development of 'combinatorial antibody libraries', a technique also developed at LMB.

To fully achieve our goals of driving innovation and speeding up the translation of the best ideas in medical science in order to deliver new preventive and therapeutic interventions, the MRC and its partners also engage directly with all industry sectors: biotechnology, pharmaceutical, diagnostics and devices. To simplify the application process and encourage interaction between public sector and industry researchers, the MRC has launched the MRC Industry Collaboration Award (MICA) scheme (see page 36). This sets out the framework for collaboration between commercial partner and academic researcher up front, as part of the research grant application.

So far, we have funded 25 MICAs at a success rate of 59 per cent. We have also recently re-launched Industrial CASE PhD studentships (see page 57) and funded industry researchers through the People Exchange Fellowships. There have been further successes with targeted, large-scale investments such as the inflammation and immunology initiative (see Box, overleaf).

Since 2008, the MRC has run a 'Pharma Forum' to provide a platform for consistent and effective engagement between the MRC and industry. It has overseen our strategic interaction with industrial partners and contributed to schemes including the inflammation and immunology initiative. In 2011, the Pharma Forum adopted a new format, bringing in the BBSRC and EPSRC. The forum is now the focus for setting the strategic agenda across all research councils and the pharmaceutical industry, together with the Technology Strategy Board (TSB).

We know from MRC e-Val, our regular survey of MRC researchers and grantholders, that 20 per cent of MRC scientists had productive interactions with the private sector between 2006 and 2010. The exchange of staff, expertise, materials and funding between industry and academia is vital to fostering an environment that supports translation of research. We have to ensure that all such opportunities for working together are followed through – this means actively encouraging interaction and removing barriers to collaboration.

The MRC and NIHR – through the NIHR Office for Clinical Research Infrastructure – have developed a new model agreement for collaborations between industry, universities and the NHS. Launched in February 2011, the model Industry Collaborative Research Agreement (mICRA) will help improve

the speed, ease and efficiency of negotiating the terms under which collaborations are conducted.

Contributions from the life sciences industry, higher education institutions and the NHS, together with the Intellectual Property Office and expert legal opinion, mean a range of robust templates have been developed to support various collaborative research scenarios. In all cases, mICRA should remove any unnecessary delays in starting collaborative studies in the UK.

MRC/ABPI Inflammation and Immunology Initiative

The MRC and the Association of the British Pharmaceutical Industry (ABPI) have been working together to promote better interaction between academics and the pharmaceutical industry. As part of this strategy, and building on discussions within the MRC's Pharma Forum, the MRC and the ABPI held a workshop in 2009 to develop a new initiative in immunology and inflammation. It led to two funding workshops: one in chronic obstructive pulmonary disease (COPD) and one in rheumatoid arthritis and other inflammatory joint diseases. Each workshop brought together key experts from a range of sectors to identify clinical and preclinical research priorities in areas such as biomarkers, disease stratification, models and imaging.

Four pharmaceutical companies, 10 universities and an NHS Trust are collaborating to tackle COPD. An initial investment of £6 million over four years will fund a central cohort of well-phenotyped patients and samples that will help to understand:

- The innate immune response in COPD, especially in relation to bacterial and viral infections and their role in exacerbating the disease.
- Mechanisms of tissue damage and repair in order to identify biomarkers and novel targets.
- The underlying causes of loss of muscle function in COPD.

The partners are: AstraZeneca, GlaxoSmithKline, Novartis, and Pfizer; the Universities of Birmingham, Edinburgh, Leicester, Manchester, Newcastle, Nottingham, Southampton and Sheffield, Imperial College London, Royal Brompton Hospital and University College London.

In rheumatoid arthritis, 13 industry partners and 9 universities are involved in a £3.5m, four-year project to fund work developing:

- Early rheumatoid arthritis and pre-disease cohorts.
- A toolkit to look at immune markers, both innate and adaptive, in whole blood.

The partners are: Abbott, Affymetrix, Amgen, AstraZeneca, Crescendo Bioscience, Eisai, GlaxoSmithKline, MedImmune, Pfizer, Roche, Sanofi, TcLand Expression and UCB Celltech; Universities of Birmingham, Glasgow, Leeds, Manchester and Newcastle, King's College London, University College London, Imperial College London and Queen Mary, University of London.

This is a new way for the MRC to bring together academic and industry scientists to develop and implement solutions to highlighted problems. The inflammation and immunology initiative was followed in March 2011 by a workshop on obesity, diabetes and metabolic medicine. Again, the approach is for scientists across the sectors to discuss gaps, opportunities and ways of working collaboratively. Development in this area will be reported in next year's Annual Report.

Stratified medicine

Stratified medicine applies the latest scientific and technological advances to identify subgroups of patients with specific mechanisms of disease or distinct responses to treatments. It enables doctors to prescribe the most effective treatment guided by diagnostic tests that help to ensure the right patient gets the right treatment at the right time, avoiding inappropriate use or overuse of drugs, or other forms of treatment such as surgery and radiotherapy.

The MRC is leading on the stratification of high priority diseases, including two areas identified in the MRC/ABPI inflammation and immunology initiative (see Box), and we are developing further joint academic/industry initiatives in disease areas where UK medical research strengths and translational/commercial opportunities align. We have worked

with the TSB, the Department of Health, Cancer Research UK and the National Institute for Health and Clinical Excellence (NICE) to develop a new £50m Stratified Medicines Innovation Platform, which will place the UK at the centre of the stratified medicine revolution. The fund will support innovative R&D in areas such as tumour profiling and the development of inflammatory biomarkers.

We have also invested in underpinning research skills in clinical pathology and pharmacology and informatics, and are continuing to widen translational links to industry in biomarkers/diagnostics research, work with other funders to maximise use of clinical sample resources, and develop and disseminate research methodology in trials and large data analysis to maximise the academic contribution to stratification.

Regulation, ethics, governance and working with decision-makers

The MRC is recognised by research regulatory authorities as a key stakeholder and we play an important role in influencing UK and European policy-makers. Our objective is to uphold and guide ethical research practice and the highest standards of research governance. To achieve this, we monitor and influence proposed changes to legislation and regulations to avoid negative impacts on the environment for medical research in the UK and ensure the regulatory burden on researchers is minimised, while aiming to maintain the confidence of the public.

In November 2010, the revised European Union (EU) Directive on the use of animals in scientific research (2010/63/EU) entered into force. Our activity during the year has focused on influencing the plans for transposition of the

Directive into UK law, working closely with the UK Bioscience Sector Coalition, which includes representatives from industry, academia, science funding organisations and breeders. We have maintained a constructive dialogue with the Home Office and highlighted key issues to be addressed in the transposition and opportunities to reduce the regulatory burden on researchers without adversely affecting animal welfare.

The MRC also provided input into the Ministry of Justice consultation on the current Data Protection legislative framework and participated in a workshop to ensure that the needs of research were taken into account in plans for revision of the Data Protection Act. We have continued to engage with academic and funding partners in the UK regarding the forthcoming proposals to revise the EU Clinical

Trials Directive, and provided input to the Academy of Medical Sciences review of the regulation and governance of health research commissioned

by the Government. The MRC regularly provides evidence to parliamentary and other bodies' consultations and inquiries (see Table 5).

Table 5: Consultation and inquiry submissions 2010/11

Body	Number of submissions
Government departments and agencies	14
Parliamentary Select Committees	12
Regulatory bodies	-
International bodies	2
Other bodies	3
Total	31

The full submissions are available on the MRC website.

Regulatory support for researchers

The MRC Regulatory Support Centre (RSC) provides medical researchers with training, tools and guidance, much of which is available online. The number of visitors to the RSC website doubled over the year and over 150 queries were addressed by RSC staff. More than 300 people attended the "Sharing human tissue: new opportunities, new horizons" conference in September 2010, examining the regulatory, ethical and practical aspects of sharing human tissue for research.

Governance

The MRC's Council has four subcommittees with responsibility for specific areas of the Council's remit. An ad hoc group met this year to advise the Chairman on how to improve the Council's governance arrangements and following this the remit of three subcommittees were expanded. The remit of the Remuneration Committee now includes oversight of human resources, including overall compensation strategy and people planning. The role of the Council Audit Committee was widened to include responsibility for scrutinising the financial information provided to the Council and its name was changed to the Council Audit and Finance Committee. Finally, the Nominations Committee will now also advise the Chairman on the appointment of chairs of the MRC's research boards.

Open access

The MRC is a champion of 'open access' publishing in science. Open access means that research papers are freely accessible to all, without the limitation of paid subscription. Papers published in this way can also be copied and repurposed, and new technologies such as text mining can be applied to their content.

In 2006, the MRC introduced an open access mandate, requiring peer reviewed papers published in open access to be deposited within six months in UK PubMedCentral (UKPMC). Since then, we have actively worked with a variety of stakeholders to facilitate the transition to open access. A majority of journals commonly used by MRC-funded authors now provide an open access option that complies with the MRC's mandate. Collaboration

with other research councils, biomedical research funders and organisations such as JISC has led to an understanding of our policy across the scientific community. The MRC is still proactively working to make the mechanisms and processes around open access publishing as easy for the authors as possible. In the last year, for example, we have reviewed our website to include a list of 'most-used' journals, with compliance and publishers' information readily available.

UKPMC has continued to develop: it is now possible to identify proteins, genes, species, chemicals and diseases automatically in open access papers. Over the past year, the MRC has renewed its commitment to fund UKPMC for another five years to a maximum of £1.2m. The MRC has worked with other UKPMC funders to select a consortium to support the platform and develop it over this period of time, and a group led by the European Bioinformatics Institute was appointed. A number of new funders will join in the next phase, which is a clear recognition of the success of UKPMC as an open access repository.

Communication

The MRC is committed to communicating effectively with researchers, both through the grant application process and afterwards for evaluation. We also interact regularly with stakeholders across the UK government and devolved administrations, the private sector, media, charities and international partners.

These activities help to ensure that our research contributes to the future prosperity and wellbeing of the UK. In addition, we undertake activities to raise public awareness of, and engagement with, science. These responsibilities, which can also help to advance the uptake and use of MRC research, are enshrined in the MRC's Royal Charter:

- Generating public awareness.
- Communicating research outcomes.
- Encouraging public engagement and dialogue.
- Disseminating knowledge.
- Providing advice.

In 2010/11, the MRC developed a new communications strategy, agreed by the MRC's Council, to support our overall Strategic Plan.

In implementing our communications strategy, the MRC's approach is: informing, engaging and influencing. Acknowledging the interdependence of different communications activities, we are adopting a focused, project-based approach.

Wherever possible and appropriate, we seek to work closely with our partner organisations, sharing best practice and maximising the use of resources.

The 2010 general election brought not only a change of Government, but also many new Members of Parliament with varying degrees of knowledge, experience and understanding of scientific research. To address this situation, an event called "Science in the New Parliament" was organised by Research Councils UK (RCUK) and the Parliamentary Office for Science and Technology (POST) in October 2010.

The MRC worked closely with RCUK, POST and the other research councils to ensure the event showcased excellent science and gave peers and MPs the opportunity to find out more about how science is funded in the UK and how it contributes to the nation's health and wealth. Two of our scientists were invited to discuss their successful

translational research. Sir Gregory Winter, from the MRC Laboratory of Molecular Biology, presented his pioneering research on techniques to produce humanised therapeutic antibodies, and Dr Rebecca Fitzgerald of the MRC Cancer Cell Unit was on hand to show the details of a new screening test for a precursor of oesophageal cancer.

Every year, the British public has opportunities to engage with research at the many science festivals that take place in cities across the country. The MRC has a long history of contributing to science festivals and 2010/11 was no exception. From Edinburgh to Brighton, Cheltenham to Cambridge, MRC-funded scientists turned out in force to show festival-goers how we support world-class and fascinating scientific research. Participating researchers are supported by our regional communications managers and the rest of the communications team, who offer training in public engagement and science communication.

At the Cheltenham Science Festival in June 2010, the MRC's neuroscience stand, called "About a brain", was voted joint-favourite hands-on activity by visitors. In July, at the Royal Society's Summer Science Festival in London, the MRC Centre for Regenerative Medicine ran an exhibition called "Stem cells for blood transfusion?", which explored the possibility of generating blood from stem cells. Over 10,000 people had the chance to watch their own blood cells flowing through blood vessels, find out how blood cells are made and discuss the prospects for stem cell-derived medicines.

The MRC's National Survey of Health and Development

March 2011 saw the 65th anniversary of the National Survey of Health and Development (NSHD): the first ever prospective British cohort study. The NSHD has followed the lives of over 5,000 people born in the same week in March 1946. Originally a response to concerns about inequalities in the provision of antenatal and maternity services in the UK, the NSHD has since provided a wealth of information about the influences of growth, health and environment in early life on adult disease risks.

The MRC has funded the NSHD since 1962, recognising it as a unique resource for understanding health throughout the life course. Its findings have contributed to shaping policy and improving health. One of the overriding conclusions is the importance of a good start in life. But it also shows that people can change their life trajectory by altering their lifestyle to improve their health.

Every year the NSHD participants receive a birthday card thanking them for their contribution and summarising the findings from the past year. To celebrate 65 years, the MRC Unit for Lifelong Health and Ageing, which now leads the NSHD, worked with the MRC Corporate Communications team to produce a commemorative exhibition and booklet. The exhibition opened at the Science Museum's Dana Centre in London before being shown in Manchester, Birmingham, Cardiff and Edinburgh.

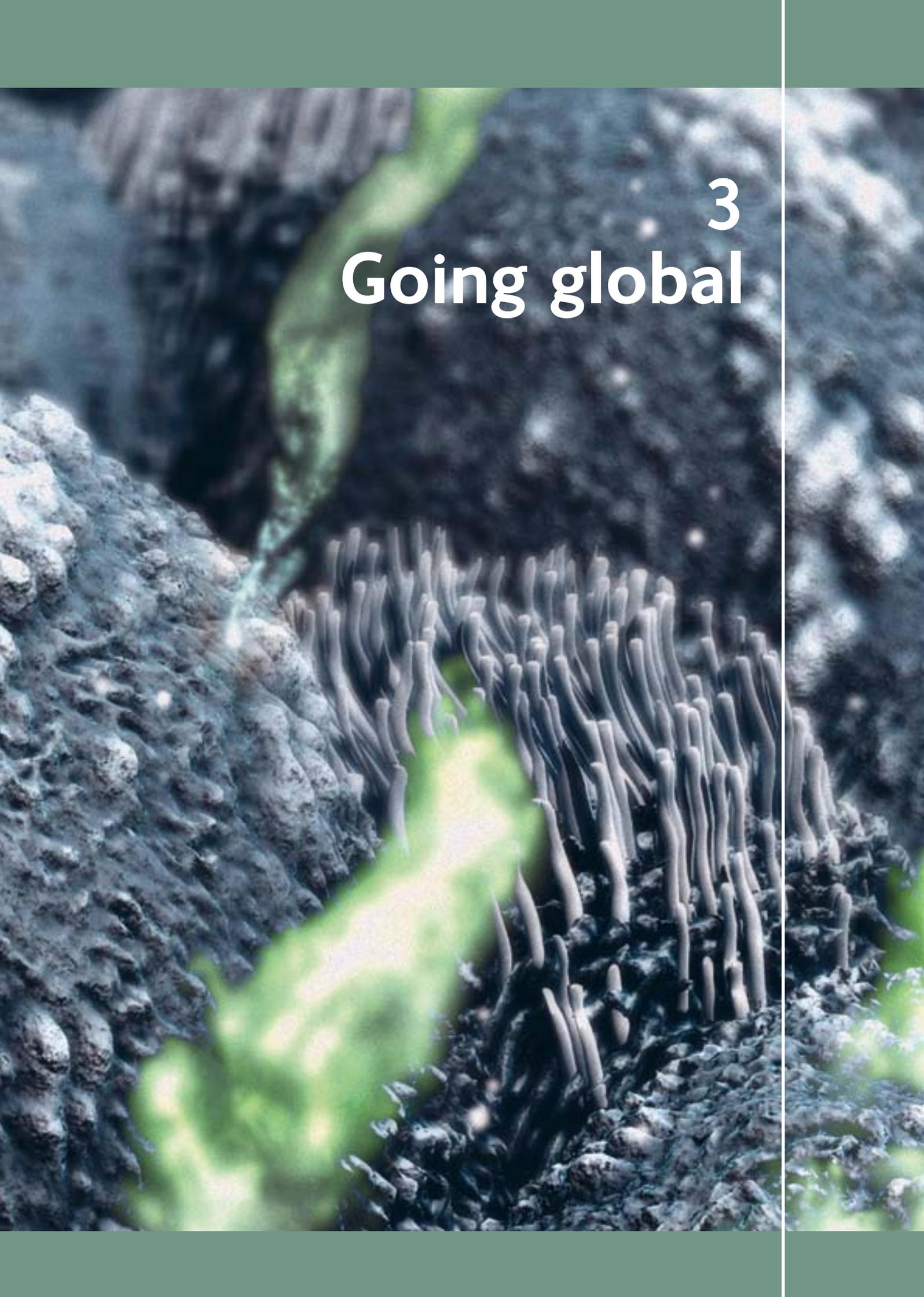
A groundbreaking study, the NSHD demonstrates the importance of public involvement in research – just over 3,000 participants remain in the study, which not only maintains the power of the research, but also engages people with the project and science more generally. The study has attracted significant media attention, helping to demonstrate the importance of longitudinal cohort studies and the need for further cohorts to be established. Indeed, a new £33.5 million birth cohort study is expected to begin in autumn 2011, supported by the Department for Business, Innovation and Skills, the MRC and the Economic and Social Research Council (ESRC).

NSHD: Long-term impact:

- Only 20 per cent of women received any kind of pain relief during labour in 1946. This finding led to changes in the regulations for the administration of anaesthesia.
- Babies born into less well off families were 50 per cent more likely to die before they were a month old. Social class differences persisted into childhood and this was an important factor in the decision to retain health visitor services after the Second World War.
- Children of manual working class parents were less likely to go to university, even if they achieved high test scores. This finding contributed to the introduction of comprehensive education.
- Ageing in later life is influenced by our experiences in childhood and throughout life. The NSHD is helping us understand which interventions will best improve life in old age.



Alveolar cells
© Thierry Berrod, Mona Lisa Production/Science Photo Library 2011

An underwater photograph of a coral reef. The scene is dominated by a large, dense colony of branching coral in shades of brown and tan. To the left, a dark, textured rock formation is visible. In the foreground, there are several out-of-focus green leaves, suggesting the photo was taken from a shallow depth. The background is dark and slightly hazy, with some light filtering through the water.

3

Going global

3. Going global

Science is a global endeavour. The MRC's experience, expertise and resources benefit the health and wealth of the UK, but our science is equally relevant across the world; providing international leadership can, in turn, enhance the competitiveness of the UK knowledge and health base.

Partnerships and shaping the agenda

Strategic partnerships help to develop world-leading collaborations and enable UK scientists to engage with the best minds, ideas and resources in the world. The MRC represents the UK's interests on the governing bodies of numerous international organisations, including the European Molecular Biology Conference, the European Molecular Biology Laboratory, the International Agency for Research on Cancer and the Human Frontier Science Program. These subscriptions promote interaction between researchers and provide infrastructure and mechanisms to support international collaboration.

In January 2011, the MRC was one of 17 international funding agencies to sign a joint statement calling for enhanced access to research data to improve public health. The statement, consistent with the MRC's existing policies, was designed to promote collaborative data-sharing between researchers and the holders of administrative public health datasets. In contrast to some other disciplines, data-sharing is not yet the norm within the public health community and this could limit progress.

In Europe, the MRC is the National Contact Point for academics participating in the Health Theme of the Seventh Framework Programme (FP7) for Research and Technological Development, the European Union's main instrument for funding research. The results available at October 2010 showed that the UK had received €2.2 billion (£2.0bn) of all the awards

made through FP7, representing approximately 14 per cent of the total available. Of this amount, €321 million (£287m) came from the Health Theme, which continues the UK's trend of receiving 17 per cent of the funding awarded in this area. Of the total UK FP7 funds awarded, researchers based in MRC units and institutes secured €36.6m (£32.8m). The MRC leads the UK delegation on the FP7 Health Programme Management Committee and has used input from numerous stakeholders throughout the year to comment on and influence calls in development.

The MRC also represents the UK on the European Innovative Medicines Initiative (IMI) States Representative Group, which is funded partly by the European Commission (EC) through FP7 and partly by members of the European Federation of Pharmaceutical Industries and Associations. IMI supports collaborative research projects, building networks of industrial and academic experts in order to boost pharmaceutical innovation in Europe. Under the second IMI call, a total of eight projects were awarded; each of these contained at least one UK participant. From these eight awards, the UK was allocated a total of €12.8m (£11.5m) of the EC funding, which represents approximately 16 per cent of the total available from the call.

The European Heads of Research Councils (EuroHORCS) has provided a significant platform from which to develop strategic alliances with other

major European funding agencies. The MRC, with Research Councils UK, has been active in discussions aimed at merging this group with the European Science Foundation, an independent body that promotes networking and collaboration, given the organisations' overlapping aims and membership.

A decision on the merger will be made later in 2011, but we believe it would help to ensure more coordinated activity across Europe ensuring that research funders were better placed to represent the research community, maintaining and strengthening Europe as a globally competitive region for research.

Global health research

The MRC has supported health research in developing countries for over 80 years, recognising that our work can bring the benefits of medical research to people all over the world. We spend around £50 million a year on global health research, through MRC units in The Gambia and Uganda, major clinical trials, usually as part of international collaborations, and other specific initiatives.

Several important calls for proposals were announced in 2010/11, including the first call to be made under the Global Alliance for Chronic Diseases (GACD), of which the MRC is a founding partner. GACD is moving from its initial strategy-setting phase to implementation: the call announced in January 2011 was for research into hypertension, and priorities in mental health research are currently being assessed.

In summer 2010, the MRC built on a burgeoning relationship with the Indian Council for Medical Research (ICMR) with support from colleagues in the Research Councils UK Office in India. Working with a partner in a major emerging economy like India allows us to combine our research strengths for the greater benefit of people in the UK and worldwide. The call was for research on chronic non-communicable disease relevant to both countries, and the funded programmes will have co-leaders in India and the UK.

The MRC has a long-standing relationship with both the Department for International Development (DFID) and the Wellcome Trust in co-funding research aimed at improving health in developing nations. As with all international collaborations, pooling resources brings together the necessary funding and experience to have the maximum positive impact on health. A new three-year, £36m joint global health trials scheme was launched in 2010/11 to support large-scale clinical trials evaluating the efficacy and effectiveness of interventions in low and middle income countries.

Many talented African scientists currently work outside the continent, partly because of a lack of grant funding and research infrastructure in sub-Saharan Africa. As a result, African nationals are under-represented as leaders in the scientific research field in sub-Saharan Africa. The MRC and DFID have a distinctive, valued role in building and sustaining excellent research teams around exceptional individuals in African institutions, fostered through strong partnerships with leading UK institutions. The MRC/DFID African Research Leadership scheme launched a £5m pilot call in 2010, which supported awards to three African scientists in South Africa, Ghana and Burkina Faso.

MRC Unit in The Gambia

Following a five-year review, the MRC's research unit in The Gambia launched a new scientific strategy, drawing together three interconnecting themes in order to tackle the biggest challenges facing child survival in Africa. The strategy will ensure that the unit maintains its strong reputation which is based on quality science and will provide a sustainable vision to drive global health priorities forward.

The three themes are vaccinology, child survival, and disease control and elimination. Each will each be delivered by a world-class research leader in the field, ensuring that the MRC's Gambia unit will continue to be a leading light for world-class research in West Africa.



MRC/UVRI Uganda Research Unit on AIDS

AIDS remains one of the biggest killers in Africa and 20 years ago Uganda was in the grip of an epidemic. It was in this context that the MRC responded to Ugandan calls for research assistance and, with the Uganda Virus Research Institute (UVRI), established the MRC/UVRI Uganda Research Unit on AIDS.

Uganda has since reduced HIV prevalence from 30 per cent of the population in some areas to just 6.4 per cent today. This reduction is testament to the success of collaborative working between scientists, the Ugandan government, global stakeholders and the Ugandan people themselves.

In July 2010, Dr Pontiano Kaleebu became the new director of the unit and, working with the Ugandan Ministry of Health, he is developing plans for the future of the unit as it responds to the changing nature of the HIV epidemic in Uganda.





Mitochondria
© Kenneth Eward/Biografx/Science Photo Library 2011

4

Supporting scientists



4. Supporting scientists

The MRC plays a pivotal role in maintaining and strengthening the UK's world-class research base. Sustaining a skilled research workforce and providing the right environment for them to work in means the scientific community can respond effectively to medical research challenges today and in the future.

More than 5,700 research staff are supported by the MRC, either employed directly in our institutes and units or funded through grants and fellowships. At the end of March 2011, there were around 250 MRC fellows and 1,900 PhD students in higher education institutions (HEIs) and MRC research establishments. Our aim is to support outstanding individuals at critical points of their research careers, train and develop the next generation of research leaders and address national strategic skills needs.

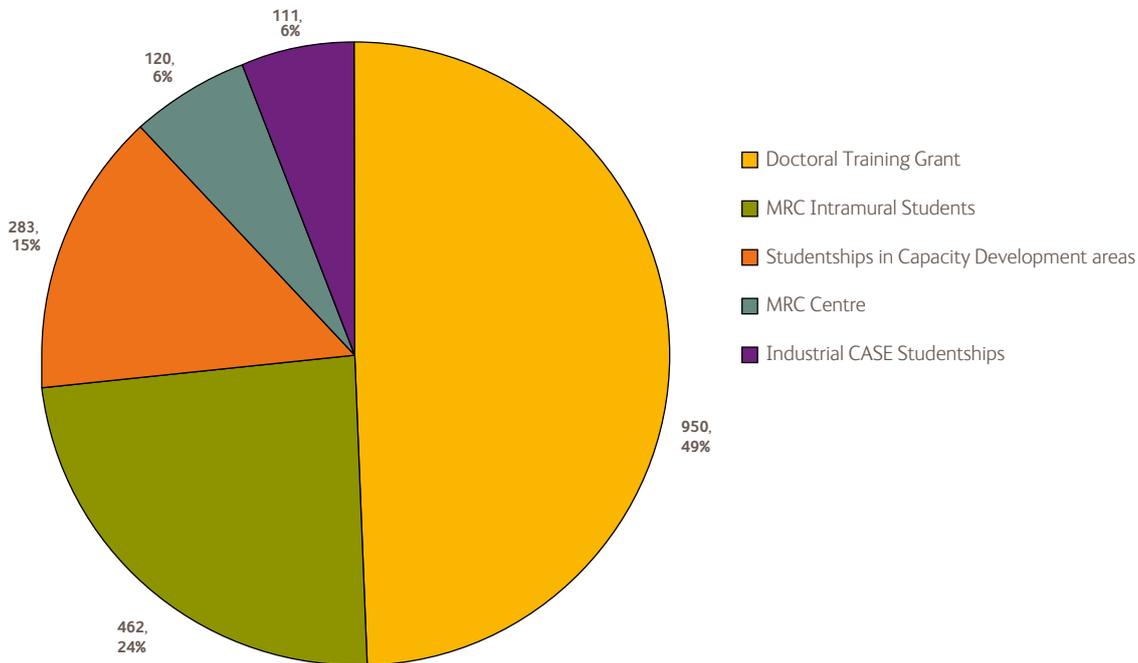
In 2010/11, we increased the annual Research Training Support Grant for PhD students from £1,000 to £5,000 per student. This money is on top of the individual's stipend and is intended to cover the costs associated with the

research they are doing. It means we will fund fewer but better supported studentships.

Approximately 40 per cent of MRC studentships are allocated to research organisations through Doctoral Training Grants, which are determined by the organisation's grant income from the MRC. Research organisations that would be eligible for more than half a studentship but fewer than three studentships a year compete for studentship funding to ensure the best quality training is available from our funding.

In order to strengthen research organisations' accountability for their use of the Doctoral Training Grants, the MRC introduced a pilot scheme of Studentship Portfolio Agreements. The scheme should also help to align training with MRC research strategies and research organisations' distinctive strengths, promote training partnerships across each research organisation and improve communication and acknowledgment of the outcomes of studentship funding.

Figure 8: MRC studentship population at January 2011



The MRC has maintained its support for senior and intermediate career fellowships, as well as our portfolio of strategic skills fellowships in methodology, biostatistics, population health sciences, bioinformatics and the economics of health. We were able to increase investment in the MRC Industrial CASE studentship scheme, which gives PhD students the opportunity to work in a life sciences company as well as doing

research in the academic environment. The MRC funded 33 CASE students in 2010/11.

This year we have also been extending and adapting the CASE PhD concept to include postdoctoral academic-industry collaborative research fellowships. Consultation has been carried out with the Association of the British Pharmaceutical Industry and others and we expect to introduce the new scheme in 2011/12.

Table 6: MRC Fellowships awarded in 2010/11

Fellowship type	Number of applications	Number of awards	Amount awarded (whole life value, £m)
Biomedical/Non-Clinical			
Career Development Awards	101	10	9.8
Senior Non-Clinical Fellowships	30	3	4.9
Clinical			
Clinical Research Training Fellowships ¹	198	48	9.6
Clinician Scientist Fellowships	43	8	6.9
Senior Clinical Fellowships	8	2	2.7
Strategic Skills and Capacity Development			
Biomedical Informatics Fellowships	23	4	1.1
Biostatistics Fellowships	4	1	0.3
Health Economics Fellowship (co-funded with ESRC and NIHR)	16	3	0.8
Methodology Research Fellowships	15	5	1.6
People Exchange Fellowship	13	5	0.3
Population Health Scientist Fellowship	51	8	2.7
Total	502	97	40.7

¹ These awards principally include clinicians undertaking doctorates

Using population-based data

The MRC invests over £100 million a year in population health research, which is funded across all our research boards and is overseen by the Population Health Sciences Group. Major strategic investments in population health include the National Survey of Health Development (see page 47), UK Biobank (see Box overleaf) and units and centres such as the MRC/Scottish Chief Scientist Office Social and Public Health Sciences Unit in Glasgow, studying social and environmental influences on health, and the MRC Lifecourse Epidemiology Unit in Southampton,

examining determinants of health outcomes across life from prenatal to later life influences.

In 2010/11, the MRC published a number of strategies in public health, including obesity research priorities, a public health infection research strategy and the MRC mental health research review. We funded addiction health clusters, the MRC population health sciences research network and several initiatives in partnership with others, including the Environmental Exposure and Health Initiative and the Translational Infection Research Initiative.

UK Biobank

In summer 2010, UK Biobank recruited its 500,000th volunteer. Around one in every 50 people aged between 40 and 69 is now a part of this groundbreaking study, which includes more detailed information than ever before. This level of participation demonstrates a remarkable willingness of the UK population to take part in research which is unlikely to benefit them directly.

Data have been collected on diet, fitness, lung function, grip strength, height, weight, hearing, brain function and family medical history. Participants have donated blood, urine and saliva and have agreed to have their health followed by the UK Biobank team throughout their lives.

This information will help scientists understand better the causes of many life-threatening and debilitating common illnesses - such as cancer, heart disease, diabetes, dementia, arthritis, Parkinson's and lung and kidney disorders – and how we might be able to prevent them. The fundamental question that UK Biobank aims to answer is why some people develop certain illnesses while others do not.

The £66 million project is hosted by Manchester University and funded by the Wellcome Trust, the MRC, Department of Health, Scottish Government, Welsh Assembly Government, Northwest Regional Development Agency and the British Heart Foundation. An independent UK Biobank Ethics and Governance Council oversees the project on behalf of its participants and the general public.

The advent of electronic health records in the NHS offers significant research opportunities to link and analyse health data to improve health. In addition, combining health records with research data from the many patient and population cohorts funded by the MRC and others will increase our understanding of the causes and development of diseases. In turn this will help accelerate the discovery of markers of disease progression and the development of more effective treatments.

Specialist skills are required for linking and analysing large datasets. To take full advantage of the research benefits offered by electronic

health records and population data, the MRC led an exercise to review the UK's current research capability and the requirements for expanding this area. Our mapping exercise found that there was an overall shortage of people with the breadth of skills necessary to manage large datasets and carry out the complex linkage and analysis required in e-health and health informatics research. The UK's major funders have agreed to jointly fund a new initiative to build and sustain capacity in e-health informatics research and provide leadership to position the UK as a world-leader in the field. The MRC will lead and manage the initiative on behalf of the funding consortium.

Research environment

The MRC supports some of the world's finest research facilities. Our three institutes attract and retain scientists from all over the world and provide long-term funding which encourages ambitious, multidisciplinary research.

We also have 24 intramural units, two university units and 27 centres, which address key challenges in medical research where grant support to higher education institutions would be insufficient. Each of our research establishments is reviewed every five years to make sure it is achieving its goals and also that it is still the most appropriate way to support research in its area.

In 2010/11, the decision was taken to close the MRC General Practice Research Framework Unit (GPRF) after four decades of work facilitating and delivering primary care research. In 2006, when the National Institute for Health Research (NIHR) was established, responsibility for primary care research in England transferred from the MRC to NIHR. Shortly after this transfer the Primary Care Research Network (PCRN) was established and recent years have also seen the establishment of the Scottish Primary Care Research Network, the Northern Ireland Clinical Research Network and the National Institute for Social Care and Health Research Clinical Research Centre

An expert review of the GPRF in 2010 recognised that these new networks have, in many areas, replicated or replaced some of the GPRF's activities. To streamline resources, the GPRF will close on 31 March 2012. While some of the GPRF's functions will transfer naturally to PCRN and the other networks, discussions are underway with academic partners regarding the transfer of the GPRF's other functions and ongoing research.

The MRC actively seeks to develop new models for research, such as MRC university units and our partnership to build and run the Francis Crick Institute (the Crick, formerly known as the UK Centre for Medical Research and Innovation).

In April 2010, two MRC units officially passed to the control of the University of Oxford and were established as 'university units'. The MRC Human Immunology Unit and the MRC Molecular Haematology Unit now sit within the renamed MRC Weatherall Institute for Molecular Medicine (WIMM). Our relationship with the university will support the development of the WIMM as an internationally competitive institute for translational medicine over the next decade.

The MRC university unit concept provides new funding avenues for the scientific community and the MRC where there are opportunities for unit-level investment in a higher education institution. Future university units might evolve from existing MRC units or centres, or be specially created. Directors and staff at university units are university employees but they will be subject to the same five-yearly review process as other MRC research establishments.

The Francis Crick Institute (the Crick) was founded by four of the UK's largest and most successful scientific and academic institutions: the MRC, Cancer Research UK, the Wellcome Trust and University College London. In 2010/11, discussions took place with Imperial College London and King's College London regarding the possibility of them joining the project and negotiations will continue in 2011/12.

Sir Paul Nurse, President of the Royal Society, took up the post of chief executive and director of the Crick on 1 January 2011, shortly before the

Government approved the MRC's business case for the institute. This action formally confirmed the funding arrangements for the project, which were included in the Government's 2010 Spending Review in October. Planning permission was granted in December 2010 and the plans have also been approved by the Mayor of London. Construction of the new building will commence in June 2011.

The new building for the Laboratory of Molecular Biology in Cambridge is entering the commissioning phase and is due for completion in early 2012. Plans for closing the existing facility are well advanced.



Rod shaped bacteria
© David Mack/Science Photo Library 2011

Operations



Operations

Efficiency and savings

During 2010/11, the MRC was closely involved in the cross-research council group which formulated a response to Sir William Wakeham's report, *Financial Sustainability and Efficiency in Full Economic Costing of Research in UK Higher Education Institutions*, published in 2010. In March 2011, RCUK published its response, *Efficiency 2011-15: ensuring excellence with impact*, which described plans to drive efficiency in research funding. Savings to be generated by the MRC over the four-year period are extensive, totalling over £106 million, including proposed savings in 2011/12 of £4.35m from research organisations and £3.41m from the MRC's own institutes and units.

Although the funds saved are reinvested in research, there will be challenges concerning spending these funds in-year each year. The savings targets for both universities and the MRC's institutes and units increase significantly in years two to four of the plan: the MRC has been careful not to specify the balance of savings across its investments because of anticipated changes in the balance of the research portfolio.

Along with the other research councils, the MRC planned in 2010/11 for the introduction in 2011/12 of zero inflation, Efficiency Groups, into which each Higher Education Institution (HEI) would be assigned, and a revised approach to capital which encourages the shared use of equipment. In 2010/11, the MRC also began its university visiting programme, where topics such as the Wakeham report are discussed.

RCUK Shared Services Centre Ltd.

The seven research councils, working together as Research Councils UK (RCUK), have established a Shared Services Centre (SSC), RCUK SSC Ltd, based in Swindon. The SSC has been set up with the aim of reducing spending through sharing and standardising processes, including more efficient procurement.

During 2010/11, the RCUK SSC Ltd procurement service delivered savings of £6.9m through strategic sourcing, cross-council collaboration and improved supplier management. This compares with a target of £6.2m for the year.

MRC people

2010/11 has been a challenging year for scientists and supporting staff at the MRC. At the beginning of the year, the new Government announced that there would be a pay and bonus freeze, that Civil Service redundancy compensation schemes would be amended, that public sector pension schemes would be reviewed and that there would be a freeze on recruitment. The Government

also asked the MRC to find an additional £4m of savings in the year. In addition, the MRC transferred systems and joined RCUK SSC Ltd, with significant temporary issues in procurement, recruitment and management reporting, and a revised immigration policy impacted on senior recruitment.

The MRC's natural competitors for the most able scientists and scientific support staff in the UK are universities, where there have been some increasing pay disparities that have affected the MRC's ability to retain and recruit staff. The two-year pay freeze has exacerbated this problem. The MRC and its National Trade Union side have been working on a revised grading and pay structure which will give people a greater chance to progress within the MRC once the pay freeze is lifted, and bring MRC pay grades into closer alignment with those of the other research councils.

In 2010, the Government enacted legislation to limit the cost of redundancy schemes for civil servants. The MRC was held outside this law by virtue of having a separate funded pension scheme and a separate collective agreement with our trade unions. The MRC and the National Trade Union side are working towards a new redundancy scheme for the MRC which is likely to be put to a ballot in 2011/12. The MRC Pension Scheme was also considered by the Hutton review and we await the impact of any changes required by the Government.

During the year, the majority of MRC Head Office finance, HR, estates, grants and administrative functions moved from London to Polaris House in Swindon to a facility shared with the other research councils. The lease on the MRC's previous Head Office in London expired in December 2010 and a new lease was agreed at existing government property in Kemble Street, London, where approximately 85 Head Office posts are now located.

The majority of staff whose posts transferred to Swindon decided not to make the move for a variety of reasons (mostly family-related), which led to the loss of many man-decades of experience. Recruitment of a reduced number of people to the new team at Swindon was

completed by the end of March 2011, although productivity was temporarily affected as people learned their new jobs and systems. As a consequence of the move to the RCUK SSC, the MRC's training requirements are now being delivered by the RCUK SSC.

Our review of HR policies and procedures continued from last year, reflecting several changes in UK employment legislation and other changes requested by the Government related to expenses policy.

The introduction of changes to the temporary points-based immigration system and the announcement of the new permanent scheme from April 2011 posed a challenge to the MRC, which hosts a range of visiting scientists and students at its institutes and units. With help from staff at the RCUK SSC and officers from the UK Border Agency, the MRC has developed procedures which we believe will comply with the new legal framework which starts in 2011/12.

This year also saw the transfer of staff based at the Weatherall Institute of Molecular Medicine from the MRC payroll to the University of Oxford under the Transfer of Undertakings (Protection of Employment) Regulations, or TUPE. Further transfers are planned for the next year which will, over time, reduce the number of people working directly for the MRC.

The provision of Equality and Diversity training within the MRC will in future be provided by RCUK SSC. The Equality Act became law in 2010 and the MRC had prepared for its impact with awareness-raising communications and is preparing for the single equality duty.

An Equal Pay Audit was carried out by an external pay specialist in spring 2009. This was in line with the Gender Equality Duty and the project was run

in conjunction with the MRC trade unions. The audit concluded that there were no widespread pay inequalities within the MRC on the grounds of age, gender, race or disability. An equality impact assessment of the new pay and grading system will be run at the appropriate time.

Finally, the National Trade Union side appointed a new chair and, as a consequence, we have been able to develop a new way of working which avoids the more formal quarterly meetings and deals much more effectively with issues in the moment.

Table 7: MRC employees analysis (for employees in post as at 31 March 2011)

Gender	Number of employees	%
Female	1,728	53.82
Male	1,483	46.18
Total	3,211	

Ethnic Group	Number of employees	%
Black/Minority/Ethnic (BME)	380	11.83
Non BME	2,377	74.03
Not disclosed	407	12.68
Other ethnic group	47	1.46
Total	3,211	

Disability	Number of employees	%
No	3,019	94.02
Yes	40	1.25
Not disclosed	152	4.73
Total	3,211	

Table 8: Sickness absence 2010/11

Sickness absence 2010-11	
Total number of staff as at 31 March 2011	3,211
Total days lost of sickness	17,956
Average working days lost	5.59

Policy and best practice

Environmental policy

The MRC is committed to the continual improvement of our environmental performance. Sustainability issues are addressed in all projects relating to the new buildings currently under design or construction. For example: the new building for the MRC Laboratory of Molecular Biology has been designed with sustainability in mind; the building

for the new Francis Crick Institute is being designed to meet the Building Research Establishment Environmental Assessment Method (BREEAM) 'excellent' standard; and the Research Complex at Harwell building employs an 'earth tube' solution to reduce energy demands and thus running costs.

The MRC has participated in the Office of Government Commerce (OGC) annual benchmarking exercises for office buildings since they started and we are currently working with OGC, the Department for Business, Innovation and Skills and other parties to devise workable methodology for the benchmarking of laboratory buildings. The MRC is participating in new government initiatives such as the Carbon Reduction Commitment and Greening Government.

Each of the MRC's units and institutes is required to have a local environmental policy and action plan. The MRC is also collaborating with other research councils and the RCUK SSC in a procurement strategy based on regional clustering and bundling of facilities management contracts. The main focus of initiatives has been to reduce utilities costs wherever possible and to promote the reduction of unnecessary or wasteful consumption.

Transparency

In support of the Government's agenda to increase transparency of how public money is spent, the MRC now routinely publishes more detailed information on management structures, senior staff pay and spending over £25,000 across the whole of the MRC, including Head Office and our research institutes and units. In our day-to-day business, publications, website and face-to-face discussions, the MRC

aims to be as open as possible in communicating our work: our Publication Scheme describes how information can be found and accessed, and Freedom of Information (FOI) requests also help to inform how information is published and routinely made available where possible.

FOI requests during 2010/11 related to corporate strategy and spending plans, research funding, contracts, staffing and infrastructure. The response rate within the deadline of 20 working days (or an agreed extended deadline) was 80 per cent. The profile of requests has changed over the year with a greater number of requests from charities and interest groups and from members of the public.

The figures shown include requests submitted to the MRC under the Freedom of Information Act between 1 April 2004 and 31 March 2011. Requests for information relating to MRC records held by The National Archives are not included in these figures, nor are requests relating to RCUK which involve the MRC but which are coordinated by the Engineering and Physical Sciences Research Council. The numbers alone do not accurately reflect the amount of resource involved in responding to requests: this has generally been increasing, in part because the MRC is making more routine information public on the website, for example.

Table 9: Freedom of information requests 2004/05 to 2010/11

Type of request	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Contracts	1	2	0	4	2	3	7
Corporate strategy, policy and governance	1	6	6	8	5	21	14
Funding applications	0	2	1	1	0	0	1
Outputs	6	15	2	6	3	3	1
Personal information	0	7	3	2	0	1	0
Research funding	18	36	16	32	26	12	8
Research strategy, policy and governance	8	18	9	7	11	2	6
Total	34	86	37	60	47	42	37

Table 10: Freedom of information requests 2004/05 to 2010/11 – requester

Requester	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Academic/HEI	4	14	5	12	6	1	2
Charities and interest groups	3	11	3	14	5	3	9
Media	1	3	2	4	8	17	4
Parliament	1	1	0	2	2	2	3
Private sector	4	12	2	5	4	3	5
Public	18	31	14	15	18	14	14
Public sector	3	11	5	6	4	0	0
Research council staff	0	3	6	2	0	2	0
Total	34	86	37	60	47	42	37

Security, safety and resilience

In line with the Government’s policy on health and safety performance, the MRC continues to strive to be an exemplar of best practice. Our strategy for health, safety and security is based on business needs and takes a holistic view of health and safety management with annual priority objectives agreed by the MRC’s Council.

The MRC’s research units and institutes remain competitively benchmarked in health and safety, personnel security and business continuity planning. The overall number of accidents reported for the calendar year 2010 was lower than the previous year. In 2010 there were 138 accidents, compared with 175 for 2009. The rate calculated for the Reporting

of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) rose slightly to 1.86 per 1,000 employees. This compared well with 2.36 per 1,000 staff in the university sector.

A mandatory eye protection policy was introduced in the summer of 2010. This resulted in a drop in reported eye injuries to staff and students from eight in the first six months of 2010 to three in the last six months. No eye injuries were reported in the first quarter of 2011.

Following a visit by an Employment Medical Advisor to one of our animal facilities to investigate a case of animal allergy, issues around the quality of risk assessments were raised. A Research Councils’

Internal Audit Service audit was commissioned to examine the approach to risk assessment for all animal facilities. The audit determined that the problem was not endemic within animal units but that reporting mechanisms should be reinforced. A quarterly improvement plan from each MRC establishment has been introduced. The Corporate Safety, Security and Resilience Section also initiated an audit programme in early 2011. The Safety, Security and Resilience team continues to contribute to international agreements on biorisk and biosafety officer competence, as well as to the national strategy for high containment facilities.

Risk and audit management

As a non-departmental public body, the MRC is required to set a policy and framework for the management of risk and audit so that the chief executive (also the accounting officer) can give assurance on the systems of internal control that support the achievement of the MRC's objectives. Building on improvements in recent years, we have continued our strong emphasis on risk management during 2010/11.

We have continued to increase the value added by audit activities and improved the Assurance Map.

Further detailed information relating to risk and audit management is included in the Statement on Internal Control (see page 93).

Business information and IT activities

As a consequence of the MRC Head Office relocation in 2010/11 to new premises in London and Swindon, there was an opportunity to rationalise the way corporate IT and information services were provided. A new section, the Business Information Centre (BIC), was established in Swindon, reducing headcount and consolidating activities which were previously dispersed.

The BIC covers a range of services, including information analysis and reporting, data management, records and document management, systems administration and support, information security, business analysis, change management, information initiatives such as open access (see page 44) and IT service delivery.

The BIC team has been heavily engaged in the activities associated with the transfer of corporate systems to the new Oracle platform, including data migration and the establishment of systems interfaces. Work has also been undertaken to review the systems for providing management information.

The relocation of the MRC Head Office to new premises in London and Swindon also necessitated significant change and rationalisation of IT infrastructure to provide increased resilience, improve productivity and reduce costs. This process has enabled the organisation to review legacy contracts and terminate services that are no longer relevant to the MRC, bringing additional cost savings.

Information systems and security

The MRC continued to make improvements in its risk profile in relation to information security and information assurance in 2010/11. The audit process, which began in 2008, has proved successful in demonstrating to units their compliance with international best practice for information security. The audit was further enhanced in 2010/11 with the addition of the Government's Security Policy Framework compliance questionnaire and greater integration with the MRC's risk management tool. The MRC continues to work closely with all the other research councils and the Department for Business, Innovation and Skills to ensure a consistent and practical approach to information security.



Human Blastocyst
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Management commentary

Management commentary

Introduction

The MRC in 2010/11

The MRC's mission is to improve human health through world-class research. We aim to achieve this by producing skilled researchers, advancing and disseminating knowledge and technology to improve the quality of life and economic competitiveness of the UK, and promoting dialogue with the public about medical research. To facilitate achievement of this mission, the MRC continues to deliver against the strategic aims and priorities set out in our Strategic Plan, *Research Changes Lives*. In 2010/11, the MRC developed a new communications strategy to support our Strategic Plan. 2010/11 also saw the first comprehensive analysis of data captured through the MRC e-Val system and the second year of data capture from more than 90 per cent of MRC-funded researchers. This has proved to be an extremely valuable tool in monitoring progress against the Strategic Plan and understanding how MRC research leads to economic, academic and social impact.

During 2010/11, we have been able to maintain strong investment in fundamental science and consolidate increased investment in research enabling us to translate scientific discoveries into new products and improved healthcare. Translational research remains high on the MRC's agenda to ensure the fruits of biomedical research are identified and exploited as quickly and effectively as possible. The MRC continues to develop initiatives and policies to bolster research in areas such as regenerative medicine, neurodegenerative diseases, mental health and addiction. Strategic partnerships with the National Institute for Health Research, the Technology Strategy Board and the other research councils play a significant role in

ensuring that MRC support is utilised effectively across these areas. Additionally, the MRC is committed to developing and sustaining close and productive partnerships with industry in the UK.

Strong Government support in times of austerity, illustrated by a protected science and research resource budget in the 2010 Spending Review, will enable us to maintain these existing research strengths. The final science and research budget allocations for 2011/12 to 2014/15 were formally published by the Department of Business, Innovation and Skills (BIS) in December 2010 and by the end of the spending review period (2014/15), the MRC will receive £649 million as its yearly budget.

The MRC has continued to see the results of a growing relationship with the other research councils and our overarching body, Research Councils UK (RCUK). Cross-council programmes bring together the range of expertise necessary to tackle the wider challenges facing society today. In particular, the MRC leads the Lifelong Health and Wellbeing cross-research council initiative, which aims to understand and deliver solutions to the issues underpinning healthy ageing.

The MRC has also continued to augment relationships with other successful scientific and academic institutions, demonstrated by the progress made by the UK Biobank project and development of the Francis Crick Institute (formerly known as the UK Centre for Medical Research and Innovation).

The MRC has experienced various structural changes in 2010/11. Following the move of the Human Immunology Unit and the Molecular Haematology Unit (both within the MRC Weatherall Institute for Molecular Medicine) into the University of Oxford, principles for transferring intramural units to university units have been defined, facilitating future transfers. In November 2010, the relocation of our Head Office to two new sites in both London and Swindon was completed. 2010/11 also saw the MRC's human resources, finance, procurement and grants systems transfer to the RCUK Shared Services Centre Ltd. Details of the efficiency savings associated with this transfer can be found on page 64.

The MRC's Delivery Plan for 2011/12-2014/15, which sets out our investment priorities and planned activities over the Spending Review period, was published in December 2010. The Delivery Plan will be refreshed annually to reflect changing priorities during the Spending Review period.

Progress in achieving objectives and milestones is reported quarterly against a scorecard.

To reflect our priorities in 2010/11, we provide information on the major awards we have made in the Annual Report. Our online research portfolio at www.mrc.ac.uk/researchportfolio provides details of individual research programmes supported by the MRC.

The MRC Annual Review, a complementary publication to the Annual Report, highlights the wider impact of MRC research on health, the economy and society. The 2010/11 Annual Review, Perspectives, focuses on the successes generated by looking at a problem from a new perspective.

All of the publications mentioned are available on the website at www.mrc.ac.uk

Information assurance

Throughout 2010/11, the MRC built on the progress it had made in information assurance and security. Education and staff awareness remain a top priority for the organisation, as demonstrated by the development of awareness posters, created in association with CESG, the Government's information assurance body. The corporate team maintains a role in coordinating major activities with the units and providing advice on policy development.

Other activities undertaken in 2010/11 included the roll out of the Information Asset Register for Head Office employees, and subsequent deployment to the units. As in previous years, the MRC undertook an audit of every unit's Information Security Management System, based

on the ISO 27001 standard. This was further enhanced by the inclusion of the Security Policy Framework questionnaire for every unit.

Plans for 2011/12 will focus on maintaining the good standard of information assurance throughout the organisation, greater involvement from the units in developing mutually beneficial services, and further inspection and auditing on the MRC's main delivery partners.

During 2010/11, there were no incidents of data loss that required notification to the Information Commissioner's Office (ICO).

The table includes incidents deemed by the Data Controller not to fall within the criteria for report to

the ICO but recorded centrally within the MRC. Small, localised incidents are not cited in these figures.

Table 11: Summary of other protected personal data related incidents in 2010/11

Category and nature of incident	Total
1. Loss of inadequately protected electronic equipment, devices or paper documents from secured MRC premises.	TWO
2. Loss of inadequately protected electronic equipment, devices or paper documents from outside secured MRC premises.	NIL
3. Insecure disposal of inadequately protected electronic equipment, devices or paper documents.	NIL
4. Unauthorised disclosure	ONE
5. Other	NIL

Public information holder

The MRC does not sell public sector information. Therefore the MRC has no statement to make in relation to compliance with cost allocation and charging requirements as set out in guidance from HM Treasury and the Office of Public Sector Information.

Thefts, losses and special payments.

During the year MRC incurred losses of £8,796. These were losses of accountable stores - £8,400 (4 cases) and a bad debt written off of £396 (1 case). No special payments were made during the year.

Financial results

The MRC has produced group financial statements for 2010/11, which include the results of MRC Technology (MRCT) as a subsidiary. The group accounts do not form part of the financial results discussed in the commentary below, which deal solely with the MRC results.

A summary of the MRC’s financial results for 2010/11 and the preceding two years is shown in the tables starting on page 77. Table 12 shows 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 13.

Limit (DEL). The DEL is the primary mechanism in resource accounting and budgeting and is split into a number of categories with rules placing certain restrictions on the use of each type. The main subdivisions are Resource DEL and Capital DEL. Resource DEL is further divided into Near-Cash DEL and Non-Cash DEL; Near-Cash DEL may be used for Non-Cash and Capital Expenditure, but other types of DEL may not be used for Near-Cash Resource Expenditure. In any one year, we normally expect to spend our DEL allocation. There is limited flexibility allowed in practice to carry forward previous years’ underspends. These underspends (in the past) have on occasion been called upon to supplement our annual DEL through End of Year Flexibility (EYF), after agreement by BIS and HM Treasury in any given year.

Each year we receive a budgetary allocation from BIS in the form of a Departmental Expenditure

Major projects

UK Centre for Medical Research and Innovation

In 2007 the MRC joined with Cancer Research UK, the Wellcome Trust and University College London (UCL) to form a consortium to set up a new joint research institute in Central London – the UK Centre for Medical Research and Innovation (UKCMRI). During the year the four funders signed a Joint Venture Agreement which established UKCMRI as a charity limited by shares, following agreement of the Charity Commission. Other significant events included :

- Appointment of the first CEO for UKCMRI.
- Planning permission secured with conditions and S106 contribution agreed.
- Formal approval of the MRC Business Case by BIS.

A further £20.2m was spent by the MRC on the project, bringing the total capital spend (including land and investments) to £77.2m as at 31 March 2011.

Renewal of the Laboratory of Molecular Biology

The MRC Laboratory of Molecular Biology (LMB) in Cambridge is currently housed in a 50-year-old building, and a renewal project involving the construction of a replacement building to provide up-to-date, internationally competitive facilities for the LMB has been underway since 2009. The construction project is due for completion in early 2012. Capital spend during 2010/11 amounted to £90.6m bringing the total capital spend to £171.7m.

RCUK Shared Services Centre Ltd

The seven research councils, working together as Research Councils UK (RCUK), have now established a shared services centre, the RCUK SSC Ltd, based in Swindon. The research councils have set up the RCUK SSC with the aim of reducing spending

through sharing and standardising processes, including more efficient procurement.

In 2009/10, the MRC transferred its grants, human resources (HR), finance and procurement operations using the 'SAP' platform to the RCUK SSC Ltd. In 2010/11, the MRC's HR, finance and procurement services were transferred to the Oracle platform, which is shared with other research councils. With the MRC being the last research council to move over to Oracle, the implementation project was closed at the end of March, but with some ongoing work to resolve a few issues that continued to hamper the day-to-day operation of the MRC's business at the start of 2011/12.

The MRC's grants operation was also transferred to the cross-council grants application process, Je-S.

The research councils have agreed to share the costs of establishing RCUK SSC Ltd and the MRC's agreed share is 26.98 per cent. In March 2011 the asset that had previously been carried in assets under construction was exchanged for increased share capital in RCUK SSC Ltd. Share capital to the value of £14,600,593, (reflecting the MRC's share of the completed asset), was issued to the MRC to reflect this. The RCUK SSC is regarded as a business critical project and is referred to in our Statement of Internal Control.

Review of the year

The MRC is required to control budgets within DEL under the Resource Accounting and Budgeting regime. The Resource outturn of £611.3m was £8.5m (1.4 per cent) lower than the provisional outturn of £619.8m (as reported to the MRC's Council in May 2011). Capital expenditure charged to DEL at £159.7m was £0.6m more than that reported to May Council.

Accounting for income and grant-in-aid

Income and expenditure are recognised in the Statement of Comprehensive Net Expenditure on an accruals basis (ie when the recipient has fulfilled its obligations, such as carried out a period of research). Grant-in-aid income and external income of a collaborative nature is credited to reserves, to better reflect the financing of our activities. Note 25 of the Accounts shows capital commitments of £317.0m (2009/10 £160.4m) and forward commitments on research awards to Higher Education Research Institutes of £771.6m (2009/10

£913.9m). These commitments fall 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 BIS. 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. The statement of financial position as at 31 March 2011 shows a pension asset of £67.6m (2009/10 £61.9m). This is the measure of the surplus in the pension scheme as valued at Statement of Financial Position date under IAS 19 – Employee Benefits. Full disclosure is given at Note 8e in the Annual Accounts.

The figures shown in the financial summary at Table 12 are those after adjusting for the difference between statutory presentation and those scoring under DEL. Table 13 shows the reconciliation of the finance tables to the Annual Accounts.

Table 12: Summary of financial return for 2010/11

	Financial Year	2010/11	2009/10	2008/09
		£000	£000	£000
External Income		(91,268)	(94,950)	(80,102)
Income from Commercial Activities		(65,847)	(66,170)	(66,423)
Amount payable to BIS		17,171	14,988	17,639
Other finance income		(114)	-	-
Total Income		(140,058)	(146,132)	(128,886)
Pay and Operating Costs		358,721	355,261	336,739
Depreciation		20,386	21,119	22,017
Amortisation of Intangible assets		21,070	19,348	21,561
Cost of Capital		-	14,303	14,429
Impairment of property, plant & equipment		3,366	-	1,317
Reversal of prior year impairment of property, plant and equipment		(9,541)	-	-
Share of losses on joint venture		1,234	-	-
Provision movement		(1,747)	(1,909)	(3,657)
Unwinding of the discount		-	199	469
Research grants		339,810	329,164	301,580
International Subscriptions		17,899	17,812	15,316
(Gain)/Loss on Disposal of Tangible fixed asset		158	-	-
Total Expenditure		751,356	755,297	709,771
Net Income & Expenditure		611,298	609,165	580,885
DEL Budget		(625,944)	(612,975)	(575,987)
(Underspend)/overspend		(14,646)	(3,810)	4,898
(Underspend)/overspend brought forward		(21,444)	(14,523)	(13,875)
Other adjustments		646	(3,111)	(5,546)
(Underspend)/overspend carried forward-				
Near-Cash, Non-Cash		(35,444)	(21,444)	(14,523)
Near-Cash		(18,049)	(12,760)	(6,634)
Non-Cash		(17,395)	(8,684)	(7,888)

Capital

	Financial Year	2010/11	2009/10	2008/09
		£000	£000	£000
Direct Capital		130,541	76,771	67,133
Capital Grants to the private sector		29,187	36,650	32,734
Total Expenditure		159,728	113,421	99,867
Capital DEL Budget		(102,017)	(108,132)	(69,110)
(Underspend)/overspend		57,711	5,289	30,757
(Underspend)/overspend brought forward		(84,588)	(89,877)	(129,172)
Adjustment to brought forward		(929)		8,538
(Underspend)/overspend carried forward		(27,806)	(84,588)	(89,877)

Table 13: Reconciliation of financial return to the Annual Account

Reconciliation of finance tables to Annual Account		2010/11 £000
	Notes	
External Income		
Contributions from other government departments	4	(17,925)
Contributions and grants from other bodies	5	(63,790)
Other Income	6	(9,522)
Interest Receivable	7	(31)
External Income per Finance Table		(91,268)
Other Finance Income		
Total Other Finance Income	8f	(13,667)
Less IAS 19 pension income adjustments	8e	13,553
Other Finance Income per finance Table		(114)
Pay and Operating Costs		
Annual Account		
Staff costs	8	170,392
Add back IAS 19 current service costs		3,377
Other operating costs	9	151,276
Commercial Activities	SoCNE	33,676
Pay and operating costs per finance table		358,721
Depreciation		
Depreciation	SoCNE	20,434
Less Release from Donated Asset Reserve	SoCNE	(48)
Depreciation per finance table		20,386
Provision Movement		
Amount provided in year	23	(2,763)
Less Amount expended in year	23	2,214
Less Unwinding of Discount (not charged to DEL)	SoCNE	249
Less early retirement costs (charged to DEL in prior years)	23	(1,447)
Provision movement per finance table		(1,747)
Research Grants		
Research Grants	10	264,407
Less capital grants to private sector		(29,187)
Other Research	11	25,878
Postgraduate training awards	12	78,712
Research grants per finance table		339,810

	Notes	2010/11 £000
Capital Expenditure		
Direct Capital		
Property, plant & equipment additions	17	141,112
Less property from Markready	18b (under Notes column)	(7,326)
Intangible asset addition- software licences	16	668
Plus Investment in Joint Ventures addition	18	23,495
Less net book value of disposed property,plant & equipment	17	(27,408)
Direct Capital per finance table		130,541
Capital Grants to private sector		
Capital grants included in Research Grants		29,187
Capital Grants to private sector per finance table		29,187

MRC financial results for the year

- The statement of comprehensive net expenditure records a net expenditure of £652.2m (2009/10 = £713.4m).
- The parliamentary grant-in-aid totalled £719.0m (2009/10 = £631.1m).
- Total income amounted to £84.0m (2009/10 = £83.3m), staff costs totalled £170.4m (2009/10 = £176.7m), other expenditure excluding depreciation totalled £151.3m (2009/10 = £145.9m) and expenditure on research grants totalled £264.4m (2009/10 = £249.3m).
- Total asset (Non-current assets and Current assets) values increased by £145.7m (2009/10 = £18.0m decrease), while current liabilities increased by £46.3m (2009/10 = £27.3m increase).
- Reserves, excluding the general reserve, showed a net decrease of £3.0m (2009/10 = increase £11.0m).
- General reserves increased by £107.3m (2009/10 = £22.2m increase).
- Total government funds at 31 March 2011 stood at £567.0m (31 March 2010 = £462.7m) (Statement of Changes in Taxpayers' Equity).
- Amounts payable to the Department for Business Innovation and Skills during the year were £17.2m (2009/10 = £15.0m).

MRC 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. In 2010/11 the MRC paid 94.1 per cent (2009/10 = 72 per cent) of invoices within 30 days. The Prompt Payers Code can be found at www.payontime.co.uk.

Audit Committee

The MRC's Council has established the Audit Committee to monitor and advise it on appropriate standards for risk management, internal control, financial propriety and anti-fraud policy and to review matters connected with audit and the provision of internal controls assurance. The Chief Executive, as the Accounting Officer, has responsibility under the terms of the Council

Management Statement and Financial Memorandum for the provision of adequate internal controls and will take into account the advice of the Audit Committee as appropriate. The Committee, chaired by Mr Tony Caplin (an MRC Council member), meets at least 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 covering 2010/11 was £225,000 for the audit of the year end financial statements. 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.

Sir John Savill

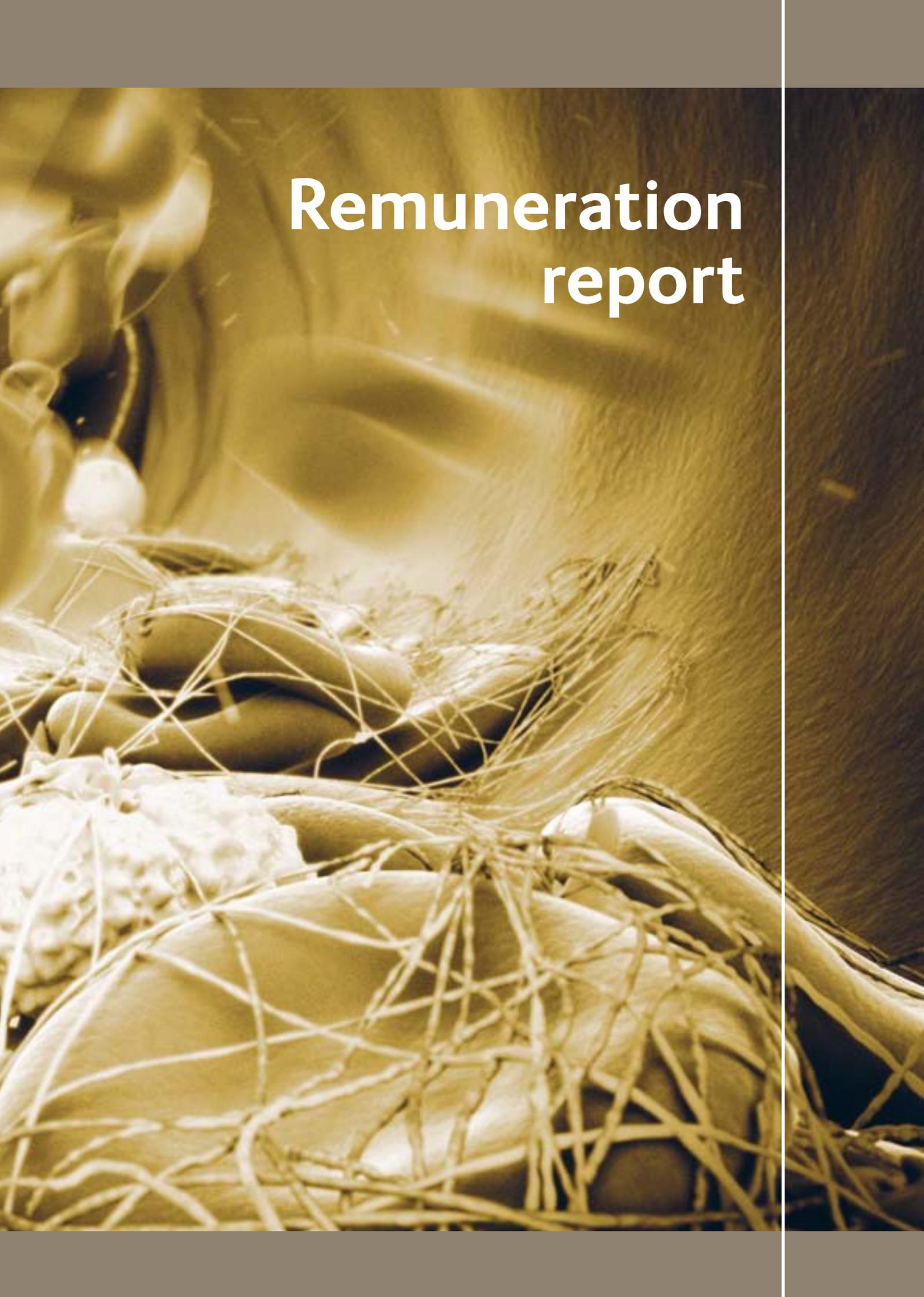
Chief Executive and Accounting Officer

Date: 23 March 2012

Sir John Savill took up the position of MRC Chief Executive in October 2010.



Blood clot
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Remuneration report

Remuneration report

Remuneration Committee

(unaudited information)

Remuneration of MRC Head Office directors and of the heads of the MRC's units and institutes is reviewed annually by the MRC Council Remuneration Committee, the membership of which during 2010/11 was:

- Sir John Chisholm, MRC Chairman
- Sir Leszek Borysiewicz, MRC Chief Executive (until 30 September 2010)
- Professor Sir John Savill, MRC Chief Executive (from 1 October 2010)
- Professor Herb Sewell, University of Nottingham and Council member
- Professor Michael Arthur, University of Leeds and Council member
- Dr Richard Henderson, MRC Laboratory of Molecular Biology and Council member

John Jeans (Chief Operating Officer and Deputy Chief Executive), Ted Smith (Human Resources Director), Mark Brooks (Head of Compensation and Benefits until December 2010) and Rebecca Leigh (Reward and Recognition from January 2011) provided advice to the committee but were not present during discussions about their own terms and conditions of service.

Remuneration policy

(unaudited information)

No formal pay scale exists for the MRC's most senior staff. Pay for this group is based on the concept of 'personal pay' and is reviewed annually by the Remuneration Committee. In this year, pay was frozen at the request of Government and no bonuses were paid.

In determining appropriate pay levels for this group, the Remuneration Committee makes reference to the changes made for all other staff in the MRC, the individual's appraisal against annual or three-to five-year objectives, the scientific (or other) performance of a unit or group, the breadth of 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.

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 (when there is no freeze) allows for a maximum 10 per cent of annual salary payment for exceptional employee contributions, paid either as a one-off bonus or consolidated base-pay component.

Senior scientific staff are appointed on open-ended contracts until normal retirement age,

subject to 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 the MRC's Early Severance and Compensation Scheme, which is currently under review after a request by Government to reduce the maximum payments made.

Basic salaries for MRC scientific staff have fallen behind rates paid in other academic institutions

in the UK in the past few years. A report from professional services company Towers Perrin estimated the gap at approximately 19 per cent in 2009. With current pay restraint, it will be difficult to redress this imbalance in the near future but a new scientific grading structure aligned more closely with that of the other research councils is expected to be implemented in 2011.

The chief executive's pay is a multiple of median pay of 5.5.

Senior staff remuneration

(unaudited information)

The following section provides details of the remuneration and pension interests of the chief executive, other members of the MRC's Management Board and of Council members. A summary of the level of remuneration for the Management Board is shown in Table 14. The levels of honoraria for MRC Council members are shown in Table 15.

Chief executive

The performance management and remuneration arrangements for the chief executive are established and managed by BIS as the MRC's sponsor department. Research council chief executives are paid both a basic salary and performance pay comprising an annual and an appointment term bonus.¹

At the beginning of each year, the Director General of Knowledge and Innovation (DGKI) at BIS and the Council chairman agree with the chief executive a set of 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 chairman,

the chief executive and an independent Council member write an assessment of performance over the year. The DGKI, with advice from colleagues, agrees the assessment of overall performance and specific achievements against objectives for annual and appointment term objectives.

A Remuneration Committee comprising the DGKI, 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 BIS.

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

The chief executive is an ordinary member of the MRC's pension scheme. Entitlements under

¹ No bonus was paid in 2010-11 or 2009-10

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 Severance and Compensation Scheme.

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 made to reimburse 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 partner'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.

Table 14: Management Board remuneration (audited information)

	Chief Executive Professor Sir John Savill ¹	Chief Executive Sir Leszek Borysiewicz ²	Chief Operating Officer & Deputy Chief Executive Mr J Jeans	Director of Corporate Affairs Dr AC Peatfield	Director of Finance Mr NW Watts ³	Director of Finance Mr B Minty ⁴	Director of Research Programmes Dr D Mulkeen	Director of Strategy Dr W Ewart	Director of Human Resources Mr T Smith	Director of Major Projects Mr A Bulger
Ages	52	60	61	58	52	55	47	58	47	56
Salary, from 1 April 2010 to 31 March 2011	£61,000	£168,685	£152,040	£93,954	£200,487	£108,333	£91,039	£111,519	£144,102	£124,102
Salary, from 1 April 2009 to 31 March 2010	-	£275,703	£152,040	£93,954	£103,113	-	£91,039	£111,519	£77,790	£101,005
Real increase in pension at age 60 ⁵	£0-£5,000	£0-£5,000	£0-£5,000	£0-£5,000	£0-£5,000	£0-£5,000	£0-£5,000	£0-£5,000	£0-£5,000	£0-£5,000
Related lump sum at 31 March 2010	-	£20,000 - £25,000	£5,000 - £10,000	£85,000 - £90,000	£20,000 - £25,000	-	£75,000 - £80,000	£5,000 - £10,000	£0 - £5,000	£0 - £5,000
Related lump sum at 31 March 2011	£0 - £5,000	£25,000 - £30,000	£10,000 - £15,000	£90,000 - £95,000	£20,000 - £25,000	£0 - £5,000	£75,000 - £80,000	£10,000 - £15,000	£5,000 - £10,000	£5,000 - £10,000
Total accrued pension at age 60	£0-£5,000	£5,000 - £10,000	£0-£5,000	£25,000 - £30,000	£5,000 - £10,000	£0-£5,000	£25,000 - £30,000	£0-£5,000	£0-£5,000	£0-£5,000
Cash Equivalent Transfer Value at 1 April 2010	-	£116,982	£40,151	£446,440	£95,759	-	£347,161	£35,926	£10,642	£18,163
Cash Equivalent Transfer Value at 31 March 2011*	£10,978	£173,346	£80,622	£513,765	£113,342	£21,670	£394,895	£74,807	£36,396	£44,640
Real increase in Cash Equivalent Transfer Value	£10,978	£56,364	£40,471	£67,325	£17,583	£21,670	£47,734	£38,881	£25,754	£26,477

1. Sir John joined on 1 October 2010. Full year equivalent £122,000 (based on working 29 hours a week)

2. Sir Leszek left on 30 September 2010; his salary included an NHS distinction award equivalent to £37,945.

3. Mr N Watts was made redundant following the Head Office relocation and his post moving to Swindon; his salary includes severance pay of £120,970.95. He left on 30th September 2010.

4. Mr Minty joined on 1 June 2010. Full year equivalent £130,000

5. As at 31 March 2011

6. Or on retirement age

7. Details of the MRC Pensions Scheme appear in note 8e of the Annual Account

8. Or date of joining if later

Council members

(unaudited information)

MRC Council members are appointed by the Minister of State for Universities and Science 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 term of up to four years.

During 2010/11, the Minister appointed one new Council member, Professor Chris Day, who took up his appointment on 1 April 2010.

The positions of Council members are non-pensionable and there is no entitlement to compensation for loss of office. Emolument

comprises an honorarium set annually by BIS.

Enhanced honoraria are paid to some members, such as Council subcommittee chairs, to reflect additional responsibilities. Details of amounts paid to each member during the year are shown in Table 15 below.

Sir John Chisholm and Dr Annette Doherty have chosen not to draw their honorarium. Dr Richard Henderson, as a member of MRC staff, and Professor Dame Sally Davies, as an employee of the Department of Health, are not entitled to receive honoraria. As an ex officio observer for the Secretary of State for Business, Innovation, and Skills, Mr John Neilson did not receive an honorarium.

Table 15: Council honoraria 2010/11 (audited information)

Name	Position/affiliation	Emolument
Sir John Chisholm	Chairman	£ —
Professor Jeffrey Almond	Sanofi Pasteur, France	£6,850
Professor Michael Arthur	University of Leeds	£6,850
Mr Tony Caplin	Northwest London Hospital NHS Trust	£9,110
Professor Chris Day	Faculty of Medical Sciences, Newcastle University (appointment commenced 01 April 2010)	£6,850
Professor Dame Sally Davies	Department of Health	£ —
Dr Annette Doherty	Pfizer Global Research and Development, Sandwich	£ —
Dr Richard Henderson	MRC Laboratory of Molecular Biology, Cambridge	£ —
Professor Dame Sally Macintyre	MRC Social and Public Health Sciences Unit, Glasgow	£6,850
Ms Vivienne Parry	Writer and Broadcaster, London	£6,850
Lord Naren Patel	House of Lords	£6,850
Professor Michael Schneider	Imperial College London	£6,850
Professor Herb Sewell	University of Nottingham	£6,850

Declared interests

(unaudited information)

In common with others who serve the public, individuals working with the MRC observe the Seven Principles of Public Life as set out by the Committee on Standards in Public Life. Members of the MRC's 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 and these declarations are published on the MRC website.

Senior MRC staff are required under the staff Code of Conduct to declare details of any company directorships and other significant interests which might conflict with their management responsibilities. Declarations of interest of MRC Management Board members are as follows:

Professor Sir John Savill is head of the College of Medicine and Veterinary Medicine at University of Edinburgh and an honorary consultant physician at NHS Lothian, working 16 hours a week for these two organisations. He is also president of the MRC Benevolent Association. Mr J Jeans is a trustee of the charity The Claire Foundation, chairman of The Claire Foundation (Trading), a member of the Scientific Advisory Council of Wales and an advisor to the University of Manchester Venture Capital Fund. Dr D Mulkeen and Mr J Jeans are Board members of MRC Technology. Dr W Ewart is a director of UK Biobank and a trustee of the Alexander Ewart Fund for Nepal. Mr T Smith is chairman and trustee of HCS Group Charity (and a director of its subsidiary trading companies, all publicly-funded careers service providers) and director of UKHR (dormant).

Sir John Savill

Chief Executive and Accounting Officer

Date: 23 March 2012

Sir John Savill took up the position of MRC Chief Executive in October 2010.



Leptin molecule
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Financial statements

Statement of the Council and Chief Executive's responsibilities

The financial statements presented are the consolidated accounts of the MRC Group incorporating MRC Technology (MRCT).

Under paragraph 3 of Schedule 1 of the Science and Technology Act 1965 the Council is required to prepare a statement of accounts for each financial year in the form and on the basis directed by the Secretary of State for Business, Innovation and Skills, with approval of HM Treasury. The accounts are prepared on an accruals basis and must give a true and fair view of the Council's state of affairs at the year end of its income and expenditure, changes in taxpayers' equity 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 issue by the Secretary of State for Business, Innovation and Skills, 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 disclosure and explain any material departures in the financial statements;
- Prepare the financial statements on a going concern basis..

The Department for Business, Innovation and Skills 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 Managing Public Money (The Stationery Office).

Statement on internal control

Scope of responsibility

As Accounting Officer, I have responsibility for maintaining a sound system of internal control that supports the achievement of the MRC's policies, aims and objectives, whilst safeguarding the public funds and departmental assets for which I am personally responsible, in accordance with the responsibilities assigned to me in Managing Public Money.

I regularly discuss significant risks to the MRC with BIS. In addition the MRC has

four bodies to support it in discharging its responsibilities relating to internal control:

- i. the MRC Management Board;
- ii. the MRC Operations Board;
- iii. the Council Audit and Finance Committee;
- iv. the Risk Management Committee.

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 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 in the MRC for the year ended 31 March 2011 and up to the date of approval of the Annual Report and Accounts, and accords with HM Treasury guidance.

Capacity to handle risk

During the year, the Research Councils' Internal Audit Service (RCIAS) carried out an audit of risk management arrangements across the MRC; this audit gave an assurance level of "substantial", with three recommendations being made for possible improvements.

The management of partnerships risks was identified within the audit as an area for improvement. The

recommendations in relation to this have been accepted and will be actioned during 2011/12.

Leadership

Leadership on risk management is provided by senior managers across the MRC. Specific expertise is provided by the MRC's corporate Risk Management Team.

Staff training

There is a diverse programme of training available to all staff and managers across the MRC. This has been expanded this year with the launch of an e-learning course in October 2010, as a general introduction to risk management. The

risk survey confirmed that the current training programme is reaching the relevant staff.

Risk management training is integrated into the overall training programme and additional training sessions are arranged for specific groups as required.

The risk and control framework

The MRC's risk management policy is regularly reviewed and approved by Council. The policy is supported by a standard operating procedure for risk identification. All managers are responsible for ensuring that significant risks are identified, that appropriate mitigating action is implemented, and all information is recorded and risks and actions are updated in the MRC's risk management software. The software enables risks to be reviewed and monitored. Reports from the software are discussed at Management Board and other key management forums across the MRC.

Integration of Risk Management and Audit has continued during the year ensuring an integrated approach to both disciplines.

Risk Management is embedded within the MRC by:

- the Audit and Finance Committee (which receives and reviews reports on risk management) provides formal reports to Council after each meeting, including any risks that need to be drawn to Council's attention;
- a network of risk champions in place across the MRC to provide local support;
- all management reports to key meetings including Council and Management Board are required to include a section on risk;
- all papers to Council are cross-referenced as appropriate to the corporate risk register;
- all projects having a risk register which is reviewed at every project board meeting;
- a risk management survey which showed that risk management is continuing to become embedded and managers are more aware, and have better understanding, of risks in their area; with risk a regular item at management meetings;
- regular regional risk management sessions being held to improve risk management processes within all regions, including identifying risk themes;
- a formal process for following up audit recommendations to ensure they have been actioned with progress monitored by the Operations Board and the Council Audit and Finance Committee;
- risk management being a regular agenda item at key meetings across the MRC;
- risk workshops being held with senior management teams within corporate Directorates. These workshops have focused on having a shared understanding of risk management in the MRC, identifying risks and establishing risk management processes within the Directorates; and
- the Head of Risk Management regularly reviewing the risk management

approach within all major projects and providing assurance on the process with recommendations for improvement as appropriate

Information risk

The management of information risks is fully integrated within the risk management process, with the Chief Operating Officer/Deputy Chief Executive as the MRC's Senior Information Risk Owner. Every MRC unit and institute undergoes an annual review of information security management systems. This process evaluates compliance with the mandatory requirements in the Cabinet Office security policy framework and with the MRC standards in 12 areas, including management and policy, identification and authentication, personnel procedures and physical security. The MRC standards are based on industry standards. In 2009/10, the Research Councils' Internal Audit Service accompanied the Corporate Information Security team on six visits, and found that the review process provided "substantial assurance" to the MRC. The recommendations of the RCIAS audit were acted upon in the 2010/11 MRC ISMS audit.

Information Security Risk Assessment

During 2010/11 the Risk team worked with Information Security to enhance assurance delivered by the Audit. Each unit risk assesses all information security elements that fell below 75%, this means that remedial actions or risk responses can be monitored through EasyRisk. The results of these assessments and associated action plans are reviewed by the risk management team and the Chief Information Officer. Internal Audit has identified this approach as best practice.

The Corporate Information Security team have created an IT Security forum which involves security representatives from each MRC unit and

institute. Both government and local policies and guidelines are discussed as well as ongoing issues. Information risk is considered and included in all projects the MRC is undertaking. Access rights to corporate systems, as recorded in the Information Asset Register, are agreed and documented ensuring full audit capability. In 2009/10, the team created an Information Asset Register at Head Office to capture assets containing protected personal information and put in place appropriate controls.

Currently all MRC-owned units are included within the audit. Compliance was followed up during the 2011/12 ISMS audit visit. All units achieved 75% or above.

Assurance requirements/map

The Assurance Map sets out the areas against which the MRC requires assurance together with the sources of assurance. The Map has been enhanced during the year to:

- Cross reference with Corporate and Directorate risks
- Cross reference with fraud risks
- give an overall assessment of the level of control

This gives visibility in one document of the assessment of our current controls (backward facing) together with exposure to risks as identified in the risk registers (forward facing).

The Assurance Map is updated and reviewed by Management Board and Audit and Finance Committee every 6 months. It is used to develop the annual audit programme.

Fraud risk assessment

During 2010/11 a workshop was held to identify fraud risks, from this activity a Fraud risk register

was produced. The MRC impact and likelihood scoring definitions have been adapted to score Fraud risks. The risk register is monitored by Management Board and Audit and Finance Committee.

Towards the end of 2010/11 RCIAS carried out an audit of Fraud Management across the MRC; this audit gave an assurance level of “substantial”, with 10 recommendations being made for possible improvements. The recommendations are being implemented. Implementation of recommendations is monitored by the Council Audit and Finance Committee.

Following the introduction of the UK Bribery Act the MRC has reviewed all relevant policies and launched an e-learning training package for staff.

Risk appetite

It is not possible to set an overall appetite for the MRC. The appetite is reflected in the Impact thresholds for the different aspects of the MRC: ie different impact and description for research units and major projects. As a general rule any risk with an overall rating of “very high” is judged to be above the risk appetite for that organisational level and must be escalated to the next level in the organisation hierarchy. In addition the risk management software sends an automatic alert to the Head of Risk Management whenever a risk is added or changed to “very high”.

Review of effectiveness

As Accounting Officer, I have responsibility for reviewing the effectiveness of the system of internal control. My review 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 Management Board, the Council Audit and Finance Committee, and Risk Management Committee, and have developed plans to address weaknesses and ensure continuous improvement of the system is in place.

In 2007 the MRC adopted the “Risk Management Assessment Framework” – a risk management assessment tool - to benchmark the MRC’s risk

management activities and measure progress. The review for 2010/11, shows that risk management has maintained its quality in 3 areas and improved in 2 areas. However in 2 areas (People and Partnerships) the score has decreased. The reduction in the number of staff with relevant skills was expected as a result of the disruption with the relocation of Head Office and a large number of staff changes this has been managed by the introduction of the e-learning tool and an increase in training courses. It is expected that performance in this area will continue to improve. The decrease in Partnerships reflects the result of the risk management audit and the need to have a more formal process for defining risks in key partnerships.

Given the decrease in scores in 2 areas the Management Board have not increased any of the targets but stated that the priority for 2011/12 should be to improve

performance for People and Partnerships and maintaining performance in other areas.

A survey of staff using the risk management software included a number of general questions on risk management. The survey revealed that risk management as a process is becoming embedded within the MRC. Thus, 90% respondents revealed that risk is on the managerial agenda and is discussed on the regular basis. The survey also established that risk management has facilitated increased risk awareness and better understanding of the management of risk.

MRC Management Board

The Management Board, comprising the Chief Executive, the Chief Operating Officer/Deputy Chief Executive, and Head Office directors, is the executive body for the MRC, providing top-level leadership and guidance on risk management issues. The Management Board regularly considers risk matters and reviews the Corporate Risk Register on a quarterly basis and the Fraud Risk Register every six months.

MRC Operations Board

The Operations Board receives six-monthly updates on top risks from each corporate Directorate and each regional centre. As part of the risk appetite process, any new risks that have been rated “very high” are brought to the board’s attention. The board receives updates on main themes arising from audits together with progress on implementing action plans arising from audit reports.

Council Audit and Finance Committee

The Audit and Finance Committee is chaired by a member of Council; its membership includes two other Council members and four lay members. In December 2010 the Council Audit Committee’s role was expanded by Council to become the Council Audit and Finance Committee.

A report from each meeting is presented to the Council.

As part of its role in providing assurance on controls the committee:

- reviews assurance requirements/map;
- agrees the annual audit programme;
- reviews all audit reports;
- monitors progress on implementing audit recommendations;
- reviews the Corporate Risk Register;
- receives updates on all major projects;
- reviews results from the Director’s Annual Statement on Internal Control;
- receives reports and presentations on key risk areas;
- reviews MRC information security audit result;
- receives notification of suspected frauds and reviews results of fraud investigations..
- scrutinises financial information that will be provided to the Council, or made public;
- advise the Council with respect to quarterly financial information and on the appropriateness of its accounting policies.

In relation to its financial and strategic budgeting information work, the Committee is aware of potential conflict between its audit and finance roles and has received guidance from RCIAS on this issue, which will remain under review.

Risk Management Committee

The Risk Management Committee reports to the Management Board. It provides leadership and direction to support the embedding of risk management across the MRC.

The Risk Management Team for the MRC comprises two risk management experts, who provide leadership, advice and support across the

MRC. Expert professional groups such as Senior Finance Managers and HR Business Partners are consulted to review risks and provide guidance on risks relevant to their area of expertise.

Institutes and units

The director of each MRC institute and unit is responsible for the management of risk for that establishment. Each unit and institute director is required to submit an Annual Statement on Internal Control which is then reviewed by the Operations Board and Council Audit Committee. Where significant risks or weaknesses in controls are highlighted these are included within the risk register and appropriate action plan identified.

Audit

The Head of Internal Audit (HIA) has provided a “positive reasonable assurance” concerning the adequacy of the risk management, control and governance systems established by MRC Management and has confirmed that he has not found any fundamental control weaknesses that undermine the general framework of control within the MRC in the areas examined.

Internal audit

The Research Councils Internal Audit Service (RCIAS) provides the internal audit function for the MRC. They work closely with the MRC Risk Management Team to ensure that there is a robust audit programme focussed on the appropriate risks and key control processes across the MRC.

The Research Councils' UK Assurance Unit is hosted by the Biotechnology and Biological Sciences Research Council (BBSRC) and acts on behalf of the Research Councils to review the regularity of expenditure on Research Council grants at research organisations. The unit's programme typically involves around 15 to 20 visits per year to the most

research intensive organisations, supplemented by around 15 desk based reviews for less research intensive bodies. Assurance activities focus on the control environment and its effectiveness in ensuring compliance with the Research Councils' terms and conditions for grant funding. In 2010-11 the planned programme of visits could not wholly be undertaken, with only 11 visits undertaken compared to the planned 19. This shortfall was due to diversion of staff to other RCUK priority work and the loss of staff resource without short-term replacement owing to Government constraints on recruitment.

Despite the shortfall in visits, and taking into account the generally positive nature of findings from the actual visits made, the programme has nevertheless provided satisfactory level of assurance. Relevant considerations include the good level of inherited assurance available from work in previous years, the fact that the 5 year rolling plan of visits is derived from a risk and assurance map and also that the percentage coverage for 201-11 in monetary terms was close to that of previous years. A further strand of work scrutinises the costings methodology used in Research Organisations which, for universities, is the Transparent Approach to Costings (TRAC). The programme is an important element of the assurance framework for MRC with an annual report produced for the accounting officer. Taking this together with the arrangement for scrutiny of awards before payment, I am confident that the necessary controls are in place to ensure the safeguarding of public money.

Audit programme

To enhance the value of audits, all scopes of individual audits are now being approved by either the Management Board or Operations Board in addition to the audit sponsor.

MRC Technology (MRCT)

The MRCT is part of the MRC Group Financial statement; it has its own governance's structure, with its own Board of Trustees. MRCT changed its governance structure, adopting new articles of association effective 31 January 2012. Up until that point, the Chairman of the Board was the MRC Deputy Chief Executive and other MRC senior managers were members of the board. Following the reorganisation of MRCT's governance arrangements, MRC has the right to appoint only one Board

member (Director) out of a total of no less than five and normally not more than ten Directors. These changes ensure that the Chairman of the Board of Trustees and a majority of the Trustees will no longer be MRC employees and are independent of the MRC. Following these changes MRCT will no longer form part of the group statement, as there is no control or significant influence exerted by MRC. The MRCT has its own Internal Control arrangements, including its own Audit and Risk Committee reporting to the board and separate auditors.

Significant risks

The Corporate Risk Register is a dynamic document that is reviewed by the Management Board every quarter. The most significant risks for 2010/11 and going forward are covered below.

1. RCUK Shared Services Centre Ltd

The RCUK Shared Services Centre (RCUK SSC Ltd) implementation is a business critical project intended to deliver a single organisation administrative support service for all UK Research Councils. This includes main administrative activities in Human Resources; Payroll; Finance and Procurement; IT; and Grants processing.

The most significant risks identified for 2010/11 and 2011/12 are :

Risk

- **Project cost phase II** – There is a risk that the RCUK SSC will fail to deliver the Inventory and other phase II items on time; to specification which will impact on operational effectiveness and increase costs. Risk that Phase II costs will be more than budget;

- **Operational cost** – There is a risk that the future operational costs are higher than current
- **Stabilisation** – The Risk that RCUK SSC services are not stabilised and that service levels do not reach level required by RC by the time BIS make decision to transfer to RCUK SSC platform.

The MRC migrated to the Oracle ERP platform in December 2010 for Human Resources; Payroll; Finance and Procurement services. Grants processing was fully migrated during 2011/12. The RCUK SSC project was closed on 31 March 2011 and the RCIAS Post Migration Audit was completed in May 2011. The RCUK SSC project governance and leadership structures have now been formally closed and the remaining issues fall to the Research Councils and the RCUK SSC Ltd to be resolved and managed.

Not all areas of specified functionality were delivered at the time of migration to the ERP Oracle platform in December 2010 and some functionality, that was delivered and worked in the test environment, did not work in the live environment. Of the specified

functionality to be delivered Inventory remains incomplete there are still modules that are not working as specified and work is on-going to provide fixes. The absence of functionality has not adversely impacted on the delivery of science; some financial controls have been affected (timeliness and quality of reconciliations; management information) causing the need for additional work for retained staff. There has been a quite considerable impact on productivity in the administrative function with, in some cases, manual workarounds having to be developed to ensure the effective management of business. The business impact, high-level risks and mitigation strategies are regularly scrutinised by MRC's Management Board and Operations Board, with regular reports to Council and the CFAC. Concerns have been raised at CEO (SSC) level and SSC have put in place a number of plans and actions to address the most critical points.

In a review published in October 2011 the National Audit Office criticised the project management. It concluded that the reasons for the overrun and delay included complex governance arrangements, slow decision making and the lack of a clear vision for the project from the outset. It highlights that the implementation of the shared services has so far not been good value for money and there is a risk that the Councils may not break even on the project costs. Operations were delivered 15 months late, and some services, particularly finance, are not yet where they need to be.

MRC and the Research Council community continue to work to improve SSC Ltd's services. We agree with the NAO that this single shared service platform has the potential to offer broader benefits through streamlined processes and those new services can take time to stabilise following launch. MRC has strengthened its interactions with SSC.

Consideration, responses and follow through on RCIAS observations go through an integrated RC/SSC end-to-end process approach overseen by a Client Services Group (CSG), which is supported by functional Practitioner Service Groups (PSGs). These groups provide a holistic approach to delivery processes, oversee audit improvements and manage Business Improvement Requests (BIRs). These need to be carefully managed throughout to ensure that both the required functionality and the necessary Value for Money are achieved. RCIAS carried out a number of System Controls Audits of end-to-end financial and HR processes; all received limited assurance. In his annual report the Director of RCIAS comments that, based on subsequent management assurance provided by RCUK SSC Ltd and the Research Councils, analysis shows that the control environment's direction of travel for each of the areas receiving limited assurance is positive. Nevertheless, RCIAS continues to stress the real importance of making sure that Business Process Audit (SSC end to end audits) issues are resolved promptly and will keep a close watch on progress on completion of agreed actions. A comprehensive internal audit strategy relating to the RCUK SSC project and operations for 2010-11 and beyond has been developed. A feature of this strategy is that the control framework operating within the ERP platform and the interfaces with the respective Research Councils will be tested end to end post implementation of the solution.

MRC is concerned by the number of internal audits of RCUK SSC that achieved limited assurance. And also the implications for functionality that has not been delivered or delivered late. However, given the understanding that both the SSC and Research Councils are progressing issues jointly, and that these audits reflect a moment in time and, as noted above, that new services can take

time to stabilise following launch, MRC is confident that the issues are and will be addressed.

2. Renewal of the MRC Laboratory of Molecular Biology (LMB)

Risk – Failure to build facility of required size and quality within approved budget

The project involves the construction of a replacement building to provide up to date, internationally competitive facilities for the LMB. The new building will be on a site adjacent to Addenbrooke's Hospital. The project is managed by a project board with a BIS representative sitting on the board.

The Main Contract works are due to be completed on budget in mid March 2012, about 6 weeks after the contractual completion date of the end of January 2012. The remaining work has been aligned into a single "Project Completion Works" package together with Transition Project fit-out works, which is due to be completed by 30th July 2012.

LMB staff have started working alongside the contractor's own teams for familiarisation prior to Early Possession of Laboratory, office, circulation and communal areas. Full building occupation is expected in October 2012 as planned.

Risks are regularly assessed and are reviewed by the Project Steering Group. The risk profile is showing a positive trend and is included in monthly reports on the project to the Project Board

3. The Francis Crick Institute (formerly known as the UK Centre for Medical Research and Innovation or UKCMRI)

Risk – If the Francis Crick project fails then MRC will not be able to maximise the value of its largest intramural investment

The programme to develop the Francis Crick Institute aims to establish a new, world class research centre in St Pancras, London.

UKCMRI (legal entity) was registered as a charity in February 2011, following the completion of a Joint Venture Agreement involving the MRC, Cancer Research UK the Wellcome Trust and University College London Two new academic partners, Imperial College and Kings College London joined on completion of a Deed of Accession in October 2011.

The UKCMRI Board consists of representatives from each of the JV Partners and five independent members, including the Chair, to govern the business of the charity. A Founders Group also has oversight of the activities of the new company to ensure members' objectives are maintained on track. The Executive Team is fully established under the leadership of CEO Sir Paul Nurse and is responsible for the delivery of the new facility and the setting up of the new institute. A Construction Project Board with members from each of the partners oversees the construction project.

Internally, the programme is shadowed by a MRC Monitoring Committee, with senior representatives from Head Office and the National Institute for Medical Research. Progress is regularly reported to Council. MRC/NIMR also has representation at each level of the Crick governance structure and takes a leadership position on some working groups.

The project was one of many selected for Project Assessment Review (PAR) in July 2010 by the new Coalition Government to assess if any savings could be achieved, but only minor reductions were recommended and the project was allowed to proceed without change. Following a further PAR in January 2011, the Full Business Case was submitted to BIS and approved in February

2011. It had been previously announced in the CSR that the project would receive £220m in funding from the Department of Health, via BIS. A further PAR is scheduled in April 2012.

The construction project received full planning permission from the Local Authority in December 2010 and has Mayor of London approval. A Pre-Construction contractor has been appointed to procure the construction work packages and to manage early site work, which started in June 2011 and progresses on schedule. On completion of the procurement activities and successful agreement of a fixed contract price, the contractor will be awarded the Main Contract in August 2012, with building completion planned in mid 2015. A transition programme has been established to manage the

transformation from the National Institute for Medical Research (NIMR) to the new institute.

The House of Commons Science & Technology Select Committee conducted an inquiry from early 2011 with Sir John Savill and other partners amongst those providing evidence. A report issued in May 2011 was complementary about the project, the main reservation being its location. The Committee has requested a status reports on a 6-monthly basis.

In addition to the corporate risk, there is a detailed MRC risks register for the project which is reviewed each month at the MRC monitoring committee. The Crick Executive Team also manage risks on the same basis as MRC and information is shared to ensure co-ordination of actions.

Control issues

In the previous Statements on Internal Control, a number of control issues were reported. These are described below; all have been addressed.

Fraud

2010/11 – two frauds were identified and reported one each in Gambia and Uganda. In both cases funds were retrieved by MRC or loss prevented by other action. Internal controls have been improved in both Units, and both units will be audited during 2011/12.

2011/12 – one UK fraud has been identified and is in the process of being investigated by the police. This involved the booking of personal travel as a business expense.

A suspected fraud was reported to the MRCT Trustees, involving a potential conflict of interest by two employees. The matter was settled through disciplinary measures. MRCT

have instigated a review to improve conflict of interest provisions within employee contracts.

In the view of the MRC the amounts themselves are not material, although there is a risk to the MRC reputation locally. Never the less the frauds are regarded seriously.

Audit reports for 2010/11

There were 19 audits during the year by RCIAS all except 3 received substantial assurance. The three audits that received limited assurance were: External Income (8 recommendations); Intellectual Property (13 recommendations); SSC Transition (2 recommendations).

External income

Controls surrounding income collection were confirmed to be operating effectively and the MRC has a clear policy framework for the

recognition of external income. Areas needing improvement included the development of local procedures, the completion of robust costings and risk assessments need to be strengthened.

Intellectual Property

MRC has outsourced its commercial intellectual property (IP) management and technology transfer to the MRCT Ltd. The systems operated by MRC and MRC Technology in respect of intellectual property protect and develop the Council's IP, a number of weaknesses need to be addressed and these fell into three broad areas : (1)MRCT document management/ workflow, (2) issues surrounding the "border" between MRC and MRCT activities and (3) co-ordination of the MRC's IP management at Unit level.

SSC Transition

A range of actions are in the process of being implemented in conjunction with other research Councils

Gambia & Uganda audits

There were also audits by Deloitte of the Gambia and Uganda units both reports identified a range of actions that are in the process of being implemented. Deloitte have been commissioned to audit both units during 2011/12

The recommendations from all reports are being implemented, with progress being monitored by Operations Board and the Council Audit and Finance Committee

Conclusion

In conclusion I recognise that the MRC has a major challenge to improve services provided by the SSC and to build confidence in these services. We have strengthened our interactions with SSC and better focused our internal audit activity.

In light of the internal control issues identified within the SSC, MRC decided to lay the 2010-11 accounts post the summer recess. The additional time this afforded enabled us to gain the necessary

assurance that the control issues identified did not materially impact on the accounts.

MRC is working collaboratively with the SSC to achieve stabilisation and ensure that the 2011-12 accounts are delivered pre recess.

I and other Research Council partners will continue to pursue these matters over the coming months.

Sir John Savill

Chief Executive and Accounting Officer

Date: 23 March 2012

Sir John Savill took up the position of MRC Chief Executive in October 2010.

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 2011 under the Science and Technology Act 1965. These comprise the Group Statement of Comprehensive Net Expenditure, the Group and MRC Statements of Financial Position, the Group and MRC Statements of Cash Flows, the Group and MRC Statements of Changes in Taxpayers' Equity 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 Medical Research Council, Accounting Officer and Auditor

As explained more fully in the Statement of the Council and Chief Executive's Responsibilities, the Medical Research Council and the Chief Executive as Accounting Officer are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. My responsibility is to audit, certify and report on the financial statements in accordance with the Science and Technology Act 1965. I conducted my audit in accordance with International Standards on Auditing (UK and Ireland). Those standards require me and my staff to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the Audit of the Financial Statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that

the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Medical Research Council's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Medical Research Council; and the overall presentation of the financial statements. In addition I read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

In addition, I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income reported in the financial statements have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

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.

Opinion on financial statements

In my opinion:

- the financial statements give a true and fair view of the state of the Medical Research Council's and the Group's consolidated affairs as at 31 March 2011 and of the consolidated net expenditure for the year then ended; and
- the financial statements have been properly prepared in accordance with the Science and Technology Act 1965 and Secretary of State directions issued thereunder.

Opinion on other matters

In my opinion:

- the part of the Remuneration Report to be audited has been properly prepared in accordance with Secretary of State directions issued under the Science and Technology Act 1965; and
- the information given in the Management Commentary part of the Annual Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept; or
- the financial statements and the part of the Remuneration Report to be audited are not in agreement with the accounting records or returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Statement on Internal Control does not reflect compliance with HM Treasury's guidance.

Report

I have no observations to make on these financial statements.

Amyas C E Morse

Comptroller and Auditor General

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

Date: 29 March 2012

Group Statement of Comprehensive Net Expenditure

for the year ended 31 March 2011

	Notes	GROUP		MRC	
		2010/11 £000	2009/10 £000	2010/11 £000	2009/10 £000
Expenditure					
Staff costs	8	177,992	182,512	170,392	176,688
Pensions - past service costs	8d	(47,664)	-	(47,664)	-
Other expenditure	9	157,187	150,865	151,276	145,898
Research grants	10	262,898	246,483	264,407	249,275
Other research	11	25,878	38,340	25,878	38,340
Postgraduate/training awards	12	78,712	78,199	78,712	78,199
International subscriptions	13	17,899	17,812	17,899	17,812
Commercial activities	14	29,338	29,086	33,676	29,086
Amortisation of intangible assets	16	28,229	24,534	21,070	19,348
Depreciation	17	21,616	22,435	20,434	21,345
Impairment of property, plant and equipment		3,366	-	3,366	-
Reversal of prior year impairments of property, plant and equipment		(9,541)	-	(9,541)	-
Total expenditure		745,910	790,266	729,905	775,991
Income					
Release of deferred income on donated asset		(48)	(226)	(48)	(226)
Commercial activities	14	(78,452)	(81,114)	(65,847)	(66,170)
Other income	6	(11,451)	(17,979)	(9,522)	(16,854)
Transfer of Markready assets	18b	(8,601)		(8,601)	
Total income		(98,552)	(99,319)	(84,018)	(83,250)
Net Operating Expenditure		647,358	690,947	645,887	692,741
Interest receivable	7	(31)	(24)	(31)	(24)
Amount payable to the Department for Business, Innovation and Skills	15	17,171	14,988	17,171	14,988
Other finance (income)/cost	8f	(13,667)	4,230	(13,667)	4,230
Unwinding of discount on provisions		249	199	249	199
(Gain)/loss on Disposal of tangible fixed assets		(173)	(21)	158	714
Loss on disposal of intangible assets		1,248		1,248	
Share of losses of joint venture		1,245	504	1,234	504
Minority Interest		(68)	49	-	-
Net expenditure for the year		653,332	710,872	652,249	713,352
Other Comprehensive Expenditure					
Net (gain)/loss on revaluation of property, plant and equipment		(1,682)	23,269	(1,682)	23,314
Net (gain)/loss on revaluation and addition of intangible assets		(33,189)	39,253	(14,191)	18,860
Actuarial (gain)/loss on defined benefit pension plan	8e	60,276	(79,178)	60,276	(79,178)
Total Comprehensive Expenditure for the year ended 31 March 2011		678,737	694,216	696,652	676,348

All activities are continuing.

The notes on page 113 through to page 156 form part of these accounts.

Group Statement of Financial Position

as at 31 March 2011

	Notes	2010/11 £000	2009/10 £000
Fixed Assets			
Intangible assets	16	168,293	163,913
Property, plant and equipment	17	527,662	428,249
Investment in Joint Ventures	18	23,888	1,627
Financial assets	18	13,245	4,675
Total non-current assets		733,088	598,464
Current assets			
Investments	18	6,508	-
Inventories	19	2,912	2,435
Trade and other receivables	20	74,405	62,026
Cash and cash equivalents	21	67,344	45,079
Total current assets		151,169	109,540
Total assets		884,257	708,004
Current liabilities			
Trade and other payables	22	(295,019)	(235,840)
Provisions falling due within a year	23	(1,223)	(1,471)
Total current liabilities		(296,242)	(237,311)
Non-current assets less net current liabilities		588,015	470,693
Non-current liabilities			
Trade and other payables	22	(26)	-
Provisions for liabilities and charges	23	(5,282)	(4,485)
Pension asset	8e	67,579	61,923
Total non current assets		62,271	57,438
Assets less liabilities		650,286	528,131
Taxpayers' equity			
Revaluation reserve		41,069	41,933
Intellectual property reserve		167,947	163,835
Pension reserve		67,579	61,923
Donated assets		731	833
Charitable funds		40,167	34,092
Minority interests		159	227
General reserve		332,634	225,288
Total government funds		650,286	528,131

Sir John Savill
Chief Executive and Accounting Officer
Date: 23 March 2012

The notes on page 113 through to page 156 form part of these accounts.

MRC Statement of Financial Position

as at 31 March 2011

	Notes	2010/11 £000	2009/10 £000
Fixed Assets			
Intangible assets	16	125,340	132,799
Property, plant and equipment	17	519,748	420,395
Investment in Joint Ventures	18	23,888	1,627
Financial assets	18	1,632	1,514
Total non-current assets		670,608	556,335
Current assets			
Investments		-	-
Inventories	19	2,912	2,435
Trade and other receivables	20	68,831	60,962
Cash and cash equivalents	21	53,536	30,439
Total current assets		125,279	93,836
Total assets		795,887	650,171
Current liabilities			
Trade and other payables	22	(289,954)	(243,440)
Provisions falling due within a year	23	(1,223)	(1,471)
Total current liabilities		(291,177)	(244,911)
Non-current assets less net current liabilities		504,710	405,260
Non-current liabilities			
Provisions for liabilities and charges	23	(5,282)	(4,485)
Pension asset	8e	67,579	61,923
Total non-current (liabilities)/assets		62,297	57,438
Assets less liabilities		567,007	462,698
Taxpayers' equity			
Revaluation reserve		41,069	41,933
Intellectual property reserve		124,994	132,721
Pension reserve		67,579	61,923
Donated assets		731	833
General reserve		332,634	225,288
Total government funds		567,007	462,698

Sir John Savill
Chief Executive and Accounting Officer
Date: 23 March 2012

The notes on page 113 through to page 156 form part of these accounts.

Group Statement of Cash Flows

for the year ended 31 March 2011

	Notes	2010/11 £000	2009/10 £000
Cash flows from operating activities			
Net operating expenditure		(647,358)	(690,946)
Depreciation		21,616	22,435
Amortisation		28,229	24,534
Transfer of asset		3,633	-
Impairment of property, plant and equipment		3,366	-
Reversal of prior year impairments		(9,541)	-
Impairment of investments		1,234	-
Other non-cash items – IAS 19 pension costs		(52,379)	(1,980)
Unwinding of discount provisions		(249)	(199)
Release of deferred income		(48)	(226)
Decrease in provision for liabilities and charges		549	(1,909)
Decrease / (increase) in inventories		(477)	252
Decrease / (increase) in trade and other receivables		(10,184)	3,252
Increase in trade and other payables		23,974	(5,461)
Taxation		0	(6)
Increase in current investments		(6,508)	0
Net cash outflow from operating activities		(644,143)	(650,254)
Cash flows from investing activities			
Interest received	7	31	24
Payments to the Department for Business, Innovation and Skills		(24)	(20)
Purchase of property, plant and equipment		(126,500)	(71,231)
Payments to acquire investments		(35,120)	-
Proceeds of disposal of property, plant and equipment		23,502	866
Proceeds of disposal of investments		3,504	2,709
Net cash outflow from investing activities		(134,607)	(67,652)
Net cash outflow before financing		(778,750)	(717,906)
Cash flows from financing activities			
Grants from parent department	3	719,000	631,077
Other capital funding received		0	293
Contributions from other government departments	4	17,925	17,823
Contributions from grants from other bodies	5	63,790	60,249
Contribution for licence fees	3	300	300
Net cash inflow from financing activities		801,015	709,742
Net increase/(decrease) in cash and cash equivalents	21	22,265	(8,164)
Cash and cash equivalents at the beginning of the period	21	45,079	53,243
Cash and cash equivalents at the end of the period	21	67,344	45,079

The notes on page 113 through to page 156 form part of these accounts.

MRC Statement of Cash Flows

for the year ended 31 March 2011

	Notes	2010/11 £000	2009/10 £000
Cash flows from operating activities			
Net operating expenditure		(645,887)	(692,630)
Depreciation charge		20,434	21,345
Amortisation charge		21,070	19,348
Capital grant of assets		3,634	-
Impairment of property, plant and equipment		3,366	-
Reversal of prior year impairments		(9,541)	-
Impairment of investments		1,234	-
Other non-cash items – IAS 19 pension costs		(52,379)	(1,980)
Unwinding of discount provisions		(249)	(199)
Release of deferred income		(48)	(226)
Decrease in provision for liabilities and charges		549	(1,909)
(Increase)/decrease in inventories		(477)	252
(Increase)/decrease in trade and other receivables		(7,869)	183
Increase in trade and other payables		13,489	1,884
Net cash outflow from operating activities		(652,674)	(653,932)
Cash flows from investing activities			
Interest received	7	31	24
Payments to the Department for Business, Innovation and Skills		(24)	(20)
Receipts from sale of tangible fixed assets		23,502	866
Payments to acquire Property, Plant and Equipment		(125,258)	(67,046)
Payments to acquire investments		(23,495)	-
Net cash outflow from investing activities		(125,244)	(66,176)
Net cash outflow before financing		(777,918)	(720,108)
Cash flows from financing activities			
Grant-in-aid received	3	719,000	631,077
Other capital funding received		0	293
Contributions from other government departments	4	17,925	17,823
Contributions from grants from other bodies	5	63,790	60,249
Contribution for licence fees	3	300	300
Net cash inflow from financing activities		801,015	709,742
Net increase/(decrease) in cash and cash equivalents	21	23,097	(10,366)
Cash and cash equivalents at the beginning of the period	21	30,439	40,805
Cash and cash equivalents at the end of the period	21	53,536	30,439

The notes on page 113 through to page 156 form part of these accounts.

Group Statement of Changes in Taxpayers' Equity

for the year ended 31 March 2011

Notes	Revaluation reserve	Intellectual property reserve	Donated asset reserve	Charitable Funds	Minority Interest	Pension reserve	General reserve	Total government funds
	£000	£000	£000	£000	£000	£000	£000	£000
Balance at 1 April 2009	69,952	227,422	766	26,426	178	(15,005)	203,088	512,827
Other capital funding received	-	-	293	-	-	-	-	293
Grants from Parent	-	-	-	-	-	-	631,077	631,077
Contributions from other government departments	-	-	-	-	-	-	17,823	17,823
Contributions and grants from other bodies	-	-	-	-	-	-	60,249	60,249
Contribution for licence fees	-	-	-	-	-	-	304	304
Recognised in Statement of Comprehensive Expenditure	-	-	(226)	-	-	-	-	(226)
Net loss on revaluation of property, plant and equipment	(23,269)	-	-	-	-	-	-	(23,269)
Net loss on revaluation of intangible assets	-	(39,253)	-	-	-	-	-	(39,253)
Actuarial gain in the pension scheme	-	-	-	-	-	79,178	-	79,178
Transfers between reserves	(4,750)	(24,334)	-	-	-	(2,250)	31,334	-
Comprehensive expenditure for the year	-	-	-	7,666	49	-	(718,587)	(710,872)
At 31 March 2010	41,933	163,835	833	34,092	227	61,923	225,288	528,131
Balance at 1 April 2010	41,933	163,835	833	34,092	227	61,923	225,288	528,131
Other capital funding received	-	-	(54)	-	-	-	-	(54)
Grants from Parent	-	-	-	-	-	-	719,000	719,000
Contributions from other government departments	-	-	-	-	-	-	17,925	17,925
Contributions and grants from other bodies	-	-	-	-	-	-	63,790	63,790
Contribution for licence fees	-	-	-	-	-	-	300	300
Minority interest	-	-	-	-	(68)	-	-	(68)
Net gain on revaluation of property, plant and equipment	1,682	-	-	-	-	-	-	1,682
Addition of intangible assets	-	20,780	-	-	-	-	-	20,780
Net gain on revaluation of intangible assets	-	12,409	-	-	-	-	-	12,409
Actuarial loss in the pension scheme	-	-	-	-	-	(60,276)	-	(60,276)
Transfers between reserves	(2,546)	(27,829)	-	-	-	65,932	(35,558)	(1)
Comprehensive expenditure for the year	-	(1,248)	(48)	6,075	-	-	(658,111)	(653,332)
At 31 March 2011	41,069	167,947	731	40,167	159	67,579	332,634	650,286

The notes on page 113 through to page 156 form part of these accounts.

MRC Statement of Changes in Taxpayers' Equity

for the year ended 31 March 2011

	Notes	Revaluation reserve £000	Intellectual property reserve £000	Donated asset reserve £000	Pension reserve £000	General reserve £000	Total government funds £000
Balance at 1 April 2009		69,952	170,729	766	(15,005)	203,088	429,530
Other capital funding received		-	-	293	-	-	293
Grants from Parent	3	-	-	-	-	631,077	631,077
Contributions from other government departments	4	-	-	-	-	17,823	17,823
Contributions and grants from other bodies	5	-	-	-	-	60,249	60,249
Contribution for licence fees	3	-	-	-	-	300	300
Recognised in Statement of Comprehensive Expenditure		-	-	(226)	-	-	(226)
Net loss on revaluation of property, plant and equipment		(23,314)	-	-	-	-	(23,314)
Net loss on revaluation of intangible assets		-	(18,860)	-	-	-	(18,860)
Actuarial gain in the pension scheme	8e	-	-	-	79,178	-	79,178
Transfers between reserves		(4,705)	(19,148)	-	(2,250)	26,103	-
Comprehensive expenditure for the year		-	-	-	-	(713,352)	(713,352)
At 31 March 2010		41,933	132,721	833	61,923	225,288	462,698
Balance at 1 April 2010		41,933	132,721	833	61,923	225,288	462,698
Other capital funding received		-	-	(54)	-	-	(54)
Grants from Parent	3	-	-	-	-	719,000	719,000
Contributions from other government departments	4	-	-	-	-	17,925	17,925
Contributions and grants from other bodies	5	-	-	-	-	63,790	63,790
Contribution for licence fees	3	-	-	-	-	300	300
Net gain on revaluation of property, plant and equipment		1,682	-	-	-	-	1,682
Addition of intangible assets		-	14,173	-	-	-	14,173
Net gain on revaluation of intangible assets		-	18	-	-	-	18
Actuarial loss in the pension scheme	8e	-	-	-	(60,276)	-	(60,276)
Transfers between reserves		(2,546)	(20,670)	-	65,932	(42,716)	0
Comprehensive expenditure for the year		-	(1248)	(48)	-	(650,953)	(652,249)
At 31 March 2011		41,069	124,994	731	67,579	332,634	567,007

The notes on page 113 through to page 156 form part of these accounts.

1. Statement of Accounting Policies

a. Basis of accounting

These financial statements have been prepared in accordance with a Direction issued by the Secretary of State for Business, Innovation and Skills (BIS) in pursuance of Section 2(2) of the Science and Technology Act 1965.

These financial statements have been prepared in accordance with the 2010-11 *Government Financial Reporting Manual* (FRoM) issued by HM Treasury.

The accounting policies contained in the FRoM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context. Where the FRoM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the Group for the purpose of giving a true and fair view has been selected. The particular policies adopted by the Group are described below. They have been applied consistently in dealing with items that are considered material to the accounts.

As part of HM Treasury's Clear Line of Sight project, the cost of capital charge will no longer need to be reported in an entity's annual report and accounts. In response to this the Medical Research Council will no longer be showing a notional costs note. It will also no longer be showing these costs on the face of the statement of comprehensive net expenditure. This is to make reporting simpler and easier to understand. For the financial years 2009-10 and 2010-11 this adjustment has no effect on the statement of comprehensive net expenditure as it was charged and reversed, and therefore the net expenditure for the year transferred to the general reserve is unaffected.

Adoption of New or Revised Standards Effective and Major FRoM Changes for 2010/11

All International Financial Reporting Standards, Interpretations and Amendments to published standards, effective at 31 March 2011, have been adopted in these financial statements, taking account the specific interpretations and adaptations included in the FRoM.

IAS 7 Statement of cash Flows (effective for periods beginning on or after 1 January 2010) – this requires that only expenditure which results in a recognised asset in the Statement of Financial Position can be classified within investing activities. MRC is compliant with IAS 7 in that the only recognised investing activities are the purchase and sale of property, plant and equipment, investments and intangible assets within the Statement of Financial position.

An additional amendment to the FRoM, effective from 1 April 2010, has been made in respect of IAS 36 Impairment of Assets. This requires impairments of property, plant and equipment that arise from a clear consumption of economic benefits to be taken direct to the Statement of comprehensive Net Expenditure.

Effective for Future Financial Years

The IASB and IFRIC issued certain standards and interpretations with an effective date after these financial statements. Where these changes are relevant to MRC's circumstances they are listed below and will be adopted at the effective date. They have not been adopted early and their adoption is not expected to have a material impact on MRC's reported income or net assets in the period of adoption.

IAS 24 Related Party Transactions (effective for periods beginning on or after 1 January 2011) – The amendment provides exemption for full disclosure of transactions with state-controlled entities and does not impact the current exemption allowed within the FReM. IAS 24 also clarifies the definition of a related party.

IFRS7 Financial Instruments: Disclosures (effective for periods beginning on or after 1 July 2011) – Detailed disclosures are required for financial assets transferred to another entity but not derecognised in their entirety and financial assets derecognised in their entirety but in which the reporting entity has an involvement. MRC does not expect there to be any transactions requiring disclosure but will assess further as appropriate for the 2012/13 financial statements.

IFRS 9 Financial Instruments: Classification and Measurement (effective for periods beginning on or after 1 January 2013) – IFRS 9 is a replacement for IAS 39 and introduced new requirements for the classification and measurement of financial assets, together with the elimination of two categories. Further proposals were introduced in October 2010 in respect of the derecognition of financial assets and liabilities. IFRS 9 is due to be expanded further in June 2011 with regard to the impairment of financial assets measured at amortised cost. MRC will undertake an assessment of the impact of IFRS 9 once the full requirements are known.

b. Accounting convention

These financial statements should be prepared under the historical cost convention, modified by the revaluation of non-current assets, and, where material, current asset investments and inventory to fair value as determined by the relevant accounting standard. This is in accordance with the 2010-11 FReM issued by HM Treasury. The accounting policies contained in the FReM apply International

Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context.

These financial statements are presented in Sterling, the group's functional currency and all amounts have been rounded to the nearest thousands.

c. Consolidation

These financial statements consolidate the financial statements of MRC and its subsidiary the Medical Research Council Technology (MRCT). MRCT is a company limited by guarantee with charitable status (Reg no. 2698321).

One other company, UK Biobank Limited has not been consolidated within these financial statements as it is not considered to be subsidiary of MRC. As MRC is one of nine trustees that manage Biobank, the MRC is not able to exert any control and so the company is not consolidated in the MRC Account. Another company, Markready Ltd, which was not consolidated last year has been closed in the year to 2010-11.

d. Property, Plant and Equipment and depreciation

Expenditure on property, plant and equipment includes the purchase of land, buildings and equipment costing £3,000 or more. Property, plant and equipment are included at valuation, being its fair value at the date of revaluation less any subsequent accumulated depreciation and impairment losses if any. 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. 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 group's properties, most valuations are on a depreciated replacement cost basis. Any

surplus or temporary deficit on revaluation is taken to a revaluation reserve. Permanent impairments in value are charged to the Statement of Consolidated Net Expenditure in the year in which they arise.

Increased depreciation charges arising from revaluations are matched by transfers from the revaluation reserve to the general reserve.

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

Depreciation is charged from the date the property, plant and equipment are available for use.

MRCT use a different capitalisation threshold of £2,000, however except for this, their plant, property and equipment and depreciation policies are in line with those of the group. The difference due to this policy divergence is not considered material and therefore no adjustment has been made within these financial statements for this.

e. Donated assets

Donated assets are capitalised at their current value upon receipt and this value is credited to the donated asset reserve. Donated assets are valued and depreciated in the same manner as purchased assets described above. Gains and losses on valuation are also taken to the donated asset reserve and, each year, an amount equal to the depreciation charge on the asset is released from the donated asset reserve to the general reserve. Similarly, any impairment of donated assets charged

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 property, plant and equipment 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

to the Statement of Comprehensive Net Expenditure is matched by a transfer from the donated asset reserve. On disposal of donated assets, the net book value of the donated asset is transferred from the donated asset reserve to the general reserve.

f. Intangible assets and amortisation

The values of patents, licences and royalties held by the group are capitalised as intangible 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 assets are amortised over the period these agreements are in force, including a full year's amortisation charge in the year of valuation. For most cases this is between seven and fifteen years, and such assets are not capitalised until the income stream is reasonably certain. Income streams are reviewed each year.

Any surplus or deficit on valuations following such reviews is taken to the intellectual property reserve.

Software costing £3,000 or more are included in intangibles and are stated at fair value and amortised from the date they are available for use over their useful lives estimated at three years.

g. Ownership of equipment purchased with group research grants

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

h. Grant-in-aid

Grant-in-aid is treated as financing, rather than income and 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 Comprehensive Net Expenditure over the estimated operational lives of the related assets.

i. Impairment

The carrying amounts of the group's assets are reviewed at each statement of financial position date to determine whether there is any indication of impairment: a financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset. If any such indication exists, the asset's recoverable amount is estimated.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount.

Impairment losses are recognised in the Statement of Comprehensive Net Expenditure.

j. 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 note 3, 4 and 5) are treated as financing and credited to general reserve, in the same way as grant-in-aid referred to in 1h above. Income is recognised in accordance with IAS 18.

k. Investments

Listed investments are shown at market value. Unrealised gains or losses arising as a result are included in the Statement of Change in Taxpayers Equity in revaluation reserve. Realised gains or losses are included in the Statement of Comprehensive Net Expenditure. Any investments the Directors intend to dispose within 12 months are included in current assets. Unlisted investments are shown at cost. Any surplus or temporary deficit on revaluation is taken to the revaluation reserve. Any permanent impairment in value is charged to the Statement of Comprehensive Net Expenditure in the year in which it arises.

l. Inventories

Livestock and consumable stores are included in the statement of financial position at lower of cost or net realisable value.

m. Research and development

As a research organisation, all of the group's research and development expenditure is charged to the Statement of Comprehensive Net Expenditure when it is incurred.

n. Cash and cash equivalents

Cash and cash equivalents comprise cash balances and deposits which are repayable on demand.

o. Foreign currencies

Monetary assets and liabilities denominated in foreign currencies are translated at the rates of exchange ruling at the statement of financial position 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 Comprehensive Net Expenditure.

p. Value Added Tax (VAT)

As the group is partially exempt for VAT purposes, all expenditure and non current 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 Comprehensive Net Expenditure as a reduction of expenditure.

q. Pension costs

Employer superannuation costs are based on an actuarially derived calculation under IAS 19. See note 8e. The defined benefit plan requires contributions to be made to separately administered funds. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit actuarial valuation method. Actuarial gains and losses are recognized as income or expense when the net cumulative unrecognized actuarial gains and losses at the end of the previous reporting year exceeded 10 per cent of the higher of the defined benefit obligation and the fair value of plan assets at that date. These gains or losses are recognized over the expected average remaining working lives of the employees participating in the plan.

The past service cost is recognized as an expense on a straight-line basis over the average period until the benefits become vested. If the benefits are already vested immediately following the introduction of, or changes to, a pension plan, past service cost is recognized immediately.

The defined benefit liability is the aggregate of the present value of the defined benefit obligation and actuarial gains and losses not recognized reduced by past service cost not yet recognized and the fair value of plan assets out of which the obligations are to be settled directly. If such aggregate is negative, the asset is measured at the lower of such aggregate or the aggregate of cumulative unrecognized net actuarial losses and past service cost and the present value of any economic benefits available in the form of refunds from the plan or reductions in the future contributions to the plan.

r. Early retirement costs

Compensation payments are provided for in the Statement of Comprehensive 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 2.9 per cent (2009/10 1.8 per cent). The unwinding of the discount has been charged to the Statement of Comprehensive Net Expenditure.

s. Operating leases

Operating lease charges are recognised in the Statement of Comprehensive Net Expenditure on a straight line basis over the term of the lease.

t. Provisions

Provisions have been made in accordance with IAS 37 for early retirement and decommissioning costs.

Provisions are recognised when it is probable that group will be required to settle a present obligation and a reliable estimate can be made of that obligation. The obligation is normally the amount that group would rationally pay to settle

the obligation at the statement of financial position date or to transfer it to a third party at that time.

This may require estimating the future cash flows in current-year prices (i.e. at the price level prevailing in and, where the time value of money is material, discounting them at the standard public sector real rate set by HM Treasury).

u. Derivatives and other financial instruments

Due to the non-trading nature of its activities and the way in which the group is financed, the group is not exposed to the degree of financial risk faced by non-public sector entities. Moreover, financial instruments play a much more limited role in creating or changing risk than would be typical of the listed companies to which IAS 32, 39 and IFRS 7, mainly apply. The group has very limited powers to borrow or invest surplus funds and financial assets and liabilities are generated by day to day operational activities and are not held to change the risks facing the group in undertaking its activities.

Trade receivables are recognised and carried at original invoice amount less an allowance for any uncollective amounts. Provision is made when there is objective evidence that the group will not be able to collect certain debts. Bad debts are written off when identified. The amount of provision is the difference between the carrying amount and the recoverable amount and is recognised in the Statement of Comprehensive Net Expenditure.

Trade and other payables are recognised in the period in which related money, goods, or services are received or when a legally enforceable claim against the MRC is established or when the corresponding assets or expenses are recognised. Receivables and payables which mature or become payable within 12 months from the

statement of financial position date have been omitted from the currency profile.

v. Grants payable

Research grants and fellowships are recognised in line with a schedule of pre-agreed payment profiles over the period of the grant duration and to the period which they relate.

w. Employee benefits

Short term employee benefits are recognised by group when an employee has rendered service in exchange for those benefits. Included in the financial statements is an accrual for the outstanding paid holiday entitlement at 31 March 2011 on a non-discounted basis.

x. Operating segments

An operating segment is a component of an entity that:

- engages in activities from which it may earn revenues or incur expenses (including revenues and expenses incurred internally),
- whose operating results are regularly reviewed by the entities' 'chief operating decision maker' to make decisions about resource allocation to the segment and to assess its performance, and
- for which discrete financial information is available.

Segments are reported if they exceed 10% of the thresholds of revenue, net expenditure level or assets.

y. Charitable funds

Included within reserves for 2010/11 are Charitable Funds. These have been included due to the consolidation of MRCT, which holds these funds. These funds are either subject

to restrictions by the donor on their use or at the discretion of the Trustees of MRCT for the furtherance of the general objectives of the charity. They have been separately disclosed due to the restrictions over their use and they are therefore cannot be transferred for use by MRC.

z. Significant estimation uncertainty

The preparation of the financial statements requires management to make estimates and assumptions that affect the application of policies and reported amounts. Estimates are continually evaluated and are based on historical experience and other factors including expectations of future events that are believed to be reasonable under the circumstances. Actual results may differ from these estimates. The estimates and assumptions which have a significant risk of causing a material adjustment to the carrying amount of assets and liabilities are discussed below.

Deferred Income

The group receives funding for mainly collaborative projects to support the group's research. The majority of such funding is received from the UK public sector, medical charities, and from overseas via the European Commission (EC). Some of the funding may involve payment for the collaboration a number of years in advance of the accounting period to which it relates; such as is common with the EC. Where there is a variance between work done in the accounting period and received funding, income will be deferred.

Pension Costs

The determination of the pension cost and defined benefit obligation (liabilities) of the employer's pension scheme depends on the selection of certain assumptions which include the discount rate, inflation rate, salary growth, mortality rates and expected rate of return. See Note 8 for further details.

Property, Plant and Equipment

Property, plant and equipment lives have been estimated by management. Much of the asset stock is of a specialised nature, scientific equipment and buildings; lives have been based on management's experience of productive use and these are sometimes at odds with the actual useful lives with the assets. Where there are material differences in the estimated lives of the assets, the assets are re-lived and accounted for accordingly.

aa. Judgements made in the process of applying accounting policies

The group's significant accounting policies are stated above. Not all of these policies require management to make difficult subjective or complex judgements. Those that follow are intended to provide an understanding of the policies that management consider critical because of the level of complexity and judgement involved in their application and their impact on the financial statements.

Intangible assets

Based on future discounted royalty income streams, estimates are subject to business uncertainty in terms of sales and the fluctuation of exchange rates, the most significant being sales in US dollars. Significant judgement has been required in assessing the impact of these variables. The policy has been judged to be compliant with IAS 38.

Investments

Subsidiary and joint venture investments detailed in Note 18 and that these correctly follow IAS 27 – subsidiaries, IAS 28 Associates and IAS 31 Joint Ventures.

Provisions for liabilities and charges

Estimates are subject to uncertainty regarding timing or amounts of obligations (legal or constructive) due by the group. Significant judgements are made regarding probability and

measurement of obligations. These include early retirement and disposal of (sealed) radioactive sources requiring the removal of radioactive substances by specialist suppliers.

Impairment of assets

Property, plant and equipment are included at recoverable amounts. Management assess whether assets retain their recoverable amount or whether the asset is impaired, suffering a permanent diminution in value. Judgements are made on

obsolescence, damage and loss resulting from normal business operations, and changes in value as part of the annual review of property, plant and equipment.

Further details are given in Note 17.

Where those assets concern investments in joint ventures, consideration has also been given to the impact on service potential as a means of determining valuation detailed in Note 18.

2. Segmental information

Analysis of Group Net Expenditure by Business Segments

	Intramural 2010/11 £000	Extramural 2010/11 £000	Corporate 2010/11 £000	Technology Transfer 2010/11 £000	Total 2010/11 £000
Expenditure					
Staff costs	141,650	1,751	26,991	7,600	177,992
Pensions - past service cost			(47,664)		(47,664)
Other operating costs	119,944	5,528	25,918	5,797	157,187
Research grants	1,537	261,361	-	-	262,898
Other research	-	25,878	-	-	25,878
Postgraduate/training awards	8,601	70,111	-	-	78,712
International subscriptions	-	17,899	-	-	17,899
Commercial activities	-	-	-	29,338	29,338
Amortisation of intangible assets	-	-	-	28,229	28,229
Depreciation of property, plant and equipment	20,434	-	-	1,182	21,616
Impairment of property, plant and equipment	-	-	3,366	-	3,366
Reversal of prior year impairment of property, plant and equipment.	-	-	(9,541)	-	(9,541)
Total operating expenditure	292,166	382,528	(930)	72,146	745,910
Income					
Release of deferred income on donated assets	(48)	-	-		(48)
Commercial activities	-	-	-	(78,452)	(78,452)
Other income	(9,225)	(297)	-	(1,929)	(11,451)
Transfer of Markready assets	-	-	(8,601)	-	(8,601)
Total operating income	(9,273)	(297)	(8,601)	(80,381)	(98,552)
Net operating expenditure	282,893	382,231	(9,531)	(8,235)	647,358

2. Segmental information (continued)

Analysis of MRC Net Expenditure by Business Segments

	Intramural 2010/11 £000	Extramural 2010/11 £000	Corporate 2010/11 £000	Technology Transfer 2010/11 £000	Total 2010/11 £000
Expenditure					
Staff costs	141,650	1,751	26,991	-	170,392
Pensions - past service cost			(47,664)		(47,664)
Other operating costs	119,944	5,528	25,804	-	151,276
Research grants	1,537	262,870	-	-	264,407
Other research	-	25,878	-	-	25,878
Postgraduate/training awards	8,601	70,111	-	-	78,712
International subscriptions	-	17,899	-	-	17,899
Commercial activities	-	-	-	33,676	33,676
Amortisation of intangible assets	-	-	-	21,070	21,070
Depreciation of property, plant and equipment	20,434	-	-	-	20,434
Impairment of property, plant and equipment	-	-	3,366	-	3,366
Reversal of prior year impairment of property, plant and equipment.	-	-	(9,541)	-	(9,541)
Total operating expenditure	292,166	384,037	(1,044)	54,746	729,905
Income					
Release of deferred income on donated assets	(48)	-	-	-	(48)
Commercial activities	-	-	-	(65,847)	(65,847)
Other income	(9,225)	(297)	-	-	(9,522)
Transfer of Markready assets	-	-	(8,601)	-	(8,601)
Total operating income	(9,273)	(297)	(8,601)	(65,847)	(84,018)
Net operating expenditure	282,893	383,740	(9,645)	(11,101)	645,887

2. Segmental information (continued)

Analysis of Group Net Expenditure by Business Segments

	Intramural 2009/10 £000	Extramural 2009/10 £000	Corporate 2009/10 £000	Technology Transfer 2009/10 £000	Total 2009/10 £000
Expenditure					
Staff costs	148,221	2,700	25,767	5,824	182,512
Other operating costs	112,545	5,714	27,639	4,967	150,865
Research grants	540	245,943	-	-	246,483
Other research	-	38,340	-	-	38,340
Postgraduate/training awards	8,819	69,380	-	-	78,199
International subscriptions	-	17,812	-	-	17,812
Commercial activities	-	-	-	29,086	29,086
Amortisation of intangible assets	-	-	-	24,534	24,534
Depreciation of property, plant and equipment	21,243	-	102	1,090	22,435
Total operating expenditure	291,368	379,889	53,508	65,501	790,266
Income					
Release of deferred income on donated assets	(226)	-	-	-	(226)
Commercial activities	-	-	-	(81,114)	(81,114)
Other income	(14,151)	(2,703)	-	(1,125)	(17,979)
Total operating income	(14,377)	(2,703)	-	(82,239)	(99,319)
Net operating expenditure	276,991	377,186	53,508	(16,738)	690,947

2. Segmental information (continued)

Analysis of MRC Net Expenditure by Business Segments

	Intramural 2009/10 £000	Extramural 2009/10 £000	Corporate 2009/10 £000	Technology Transfer 2009/10 £000	Total 2009/10 £000
Expenditure					
Staff costs	148,221	2,700	25,767	-	176,688
Other operating costs	112,545	5,714	27,639	-	145,898
Research grants	540	248,735	-	-	249,275
Other research	-	38,340	-	-	38,340
Postgraduate/training awards	8,819	69,380	-	-	78,199
International subscriptions	-	17,812	-	-	17,812
Commercial activities	-	-	-	29,086	29,086
Amortisation of intangible assets	-	-	-	19,348	19,348
Depreciation of property, plant and equipment	21,243	-	102	-	21,345
Total operating expenditure	291,368	382,681	53,508	48,434	775,991
Income					
Release of deferred income on donated assets	(226)	-	-	-	(226)
Commercial activities	-	-	-	(66,170)	(66,170)
Other income	(14,151)	(2,703)	-	-	(16,854)
Total operating income	(14,377)	(2,703)	-	(66,170)	(83,250)
Net operating expenditure	276,991	379,978	53,508	(17,736)	692,741

Net expenditure by business segment is detailed above, these are the critical operating segments, consistent with International Financial Reporting Standard 8 (IFRS 8) – Operating Segment. The report mirrors the budgetary and operating components of management information used to make decisions about operating matters. Information regarding operating segments is provided as part of the monthly reporting information to senior management.

Intramural is defined as the group's own research units and institutes. Extramural comprises all research and special contribution grant support to higher education institutes and NHS trusts. Corporate

comprises the group's Head Office and administrative functions outside of the intramural programme including all other non-capital expenditure which does not belong to any of the other segments. Technology transfer are activities devoted to the exploitation of the group's intellectual property.

Operating segments are detailed at a net expenditure level. Asset information is not routinely analysed at an operating segment level, but considered for the MRC as a whole. This is consistent with budgetary management.

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

The grant-in-aid and contributions in respect of (Animal) Licence Fees of £300,000 are provided by BIS for the financial year 2010/11 (2009/10 £300,000). Grant-in-aid and animal licence fees received are treated as financing and credited directly to reserves.

	2010/11	2009/10
	£000	£000
Grant allocation received and credited to general reserve	719,000	631,077

4. Contributions from other government departments

Group and MRC	2010/11	2009/10
	£000	£000
Department of Health	2,299	4,354
Department for International Development	10,192	6,000
NHS Executive	246	1,216
Foods Standards Agency	2,730	321
Scottish Government Health Directorates	374	404
Other	2,084	5,528
Total	17,925	17,823

5. Contributions and grants from other bodies

Group and MRC	2010/11	2009/10
	£000	£000
Other research councils	16,104	9,645
Charities	20,506	14,869
Collaboration with industry	4,578	13,170
European Commission	9,217	7,152
World Health Organization	-	55
Human Frontiers Science Program	516	21
Health Authorities and NHS Trusts	691	4,447
Universities	7,021	1,988
Other	5,157	8,902
Total	63,790	60,249

6. Other income

	Group		MRC	
	2010/11	2009/10	2010/11	2009/10
	£000	£000	£000	£000
Sales and other income	11,451	17,979	9,522	16,854

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

7. Interest receivable

Group and MRC	2010/11	2009/10
	£000	£000
Interest earned on the foreign currency accounts	2	4
Interest earned on the Sterling bank balances	29	20
Total	31	24

8. Staff costs

	Notes	Group		MRC	
		2010/11	2009/10	2010/11	2009/10
		£000	£000	£000	£000
Employee costs	8b	173,108	180,321	165,508	174,497
Non-permanent staff		5,752	6,892	5,752	6,892
Remuneration to the Group and committee members	8c	781	886	781	886
Early retirement costs		2,514	376	2,514	376
Gross staff costs		182,155	188,475	174,555	182,651
Less commercial activities	14	(4,163)	(5,963)	(4,163)	(5,963)
Staff costs for general activities		177,992	182,512	170,392	176,688

8a. Staff numbers*

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

	Group		MRC	
	2010/11	2009/10	2010/11	2009/10
	Number	Number	Number	Number
Science	1,317	1,423	1,238	1,352
Research project support	828	903	828	903
Administration	563	611	526	573
Technical services	619	650	619	650
Locally employed staff (overseas)	1,161	1,183	1,161	1,183
Total	4,488	4,770	4,372	4,661

*Staff are shown on a full time equivalent basis

8b. Employee costs

Notes	Group		MRC	
	2010/11	2009/10	2010/11	2009/10
	£000	£000	£000	£000
Salaries and wages	145,347	156,622	138,934	151,781
Social security costs	10,562	11,593	10,088	11,142
Other pension costs	8d 17,199	12,106	16,486	11,574
Total	173,108	180,321	165,508	174,497

8c. Remuneration to the Group and committee members

	Group	
	2010/11	2009/10
	£000	£000
Fees and honoraria	746	756
Social security costs	35	130
Total	781	886

8d. Other pension costs

	Group		MRC	
	2010/11 £000	2009/10 £000	2010/11 £000	2009/10 £000
Current service costs (net of employee contributions relating to MRCPS)	16,699	12,106	15,983	11,492
Other schemes		-	3	82
Total	16,699	12,106	15,986	11,574
Hammersith Immanet S75 debt cost	500	0	500	0
Total	17,199	12,106	16,486	11,574
Past service costs**	(47,664)	0	(47,664)	0

**Reflects the change in future inflation assumptions from RPI in 2010, to CPI in 2011. See note 8e. Financial assumptions used to calculate scheme liabilities.

8e. 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 between 6.0% and 6.5% pensionable earnings to the Scheme. 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.

During the year MRC paid £8.5m into the MRCPS. This was towards the estimated impact of early retirement costs, based on redundancy terms, on the pension scheme.

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 2010 at which the market value of the assets of the MRCPS was £884m (2007 = £869m). The actuarial value of the assets was sufficient to cover 110 per cent of the benefits that had accrued to members after allowing for expected future increases in earnings. Triennial valuations are conducted under the Pensions Act 2004 on a scheme specific funding basis. The scheme is 110% funded on an ongoing basis. There is no change to the employer's contribution rate in 2011/12.

The valuation used for IAS 19 disclosures has been based on the data for the most recent actuarial valuations as at 31 December 2007, and updated to take account of the requirements of IAS 19 in order to assess the liabilities of the scheme at 31 March 2011. The mortality assumptions included within the figures are that male (female) members who retire at typical ages will live to approximately age 88 (90).

Financial assumptions used to calculate scheme liabilities	2010/11	2009/10
	%	%
Rate of increase on pensionable salaries	4.75	4.20
Rate of increase on pension payments	2.50	2.70
Discount rate	5.50	5.50
Inflation rate ¹	2.50	2.70
Expected return on equities	6.80	6.99
Expected return on bonds	4.31	4.49
Expected return on overall fund ²	6.55	6.71

¹ For 2010 the inflation assumption was set to reflect the expected increases in the Retail Price Index (RPI). For 2011 the inflation assumption is set to reflect expected increases in the Consumer prices Index (CPI). This is assumed to be 0.75% lower than RPI measure. The change in measure is to reflect the change in basis of future pension increases as announced by the Government in June 2010.

² Under IAS19 the expected return on scheme assets should be based on market expectations, at the beginning of the period, for returns over the entire life of the related obligation. For equities and properties this is based on an assumed rate of outperformance over gilts of 2.5% pa.

Analysis of actuarial gain	2010/11	2009/10
	£000	£000
Actual return less expected return on pension scheme assets	9,209	196,084
Experience (gain)/loss arising on the scheme liabilities	33,154	(14,835)
Changes in mortality assumption	(57,932)	-
Changes in assumptions underlying the present value of liabilities	(44,707)	(102,071)
Actuarial (loss)/gain	(60,276)	79,178

Analysis of actuarial gain expressed as a percentage of the scheme's assets and liabilities at the statement of financial position date

	2010/11	2009/10	2008/09	2007/08	2006/07
	%	%	%	%	%
Actual return less expected return on pension scheme assets	1.02	23.29	(39.67)	(15.54)	4.16
Experience (loss)/gain arising on the scheme liabilities	(3.98)	1.90	(8.92)	(1.34)	(0.28)
Actuarial (loss)/gain	(7.24)	10.15	(22.28)	0.85	6.03

The assets and liabilities in the scheme

	2010/11	2009/10	2008/09	2007/08	2006/07
	£000	£000	£000	£000	£000
Assets					
Equities and property	778,855	747,898	524,508	706,634	771,978
Bonds and cash	121,669	94,109	83,878	89,378	87,565
	900,524	842,007	608,386	796,012	859,543
Actuarial value of liability	(832,945)	(780,084)	(623,391)	(678,204)	(759,055)
Surplus/(deficit) in scheme	67,579	61,923	(15,005)	117,808	100,488

The movements in the scheme surplus

	2010/11	2009/10
	£000	£000
Surplus/(deficit) at the start of the year	61,923	(15,005)
Current service costs net of employee contributions (note 8d)	(15,986)	(11,574)
Employer contributions*	20,701	13,554
Past service costs (note 8d)**	47,664	-
Other finance income/(cost) (note 8f)	13,553	(4,230)
Actuarial (loss)/gain	(60,276)	79,178
Surplus at end of year	67,579	61,923

*Employer contributions includes a special contribution of £8,500,000

**Reflects the change in future inflation assumptions from RPI in 2010, to CPI in 2011.
See note 8e. Financial assumptions used to calculate scheme liabilities.

8f. Other finance income

	2010/11	2009/10
	£000	£000
Expected return on pension scheme assets	56,269	37,537
Interest on pension scheme liabilities	(42,716)	(41,767)
Net return – other finance (cost)/income (note 8e)	13,553	(4,230)
Other pension cost	114	-
Total other financial income	13,667	(4,230)

Other schemes

The total superannuation contributions paid and recognised as an expense by the group in 2010/11 were £3.5k. These amounts represent employers' contributions at 5 per cent for a small number of long-serving members of the National Health Service Superannuation scheme (NHSS), which is itself a defined benefit scheme.

The NHSS is a multi employer unfunded scheme, and the group is unable to identify its share of the underlying assets and liabilities on a consistent and reasonable basis and therefore, as required by IAS 19, accounts for the Scheme as if it were a defined contribution scheme. As a result, the amount charged to the Statement of Comprehensive Net Expenditure represents the contributions payable to the scheme in respect of the accounting period.

9. Other expenditure

	Group		MRC	
	2010/11	2009/10	2010/11	2009/10
	£000	£000	£000	£000
Rent and rates	6,647	5,807	6,647	5,807
Utilities	6,611	8,679	6,611	8,679
Maintenance and cleaning	16,206	12,497	16,206	12,497
Office supplies, printing and stationery	3,402	3,518	3,402	3,518
Laboratory supplies	34,600	31,424	34,600	31,424
Management consultancy and other professional fees	14,931	18,832	14,931	18,832
RCUK activities	12,078	11,931	12,078	11,931
Postage and telephone	2,376	3,047	2,376	3,047
Audit fee *	225	100	225	100
Travel, subsistence and hospitality	7,235	7,613	7,235	7,613
Computing	6,522	4,902	6,522	4,902
Equipment servicing	6,103	4,928	6,103	4,928
Minor equipment	3,654	3,039	3,654	3,039
Miscellaneous	23,086	20,686	22,667	22,393
Transport costs	546	532	546	532
Exchange rate losses/(gains)	775	(709)	775	(709)
Bad debts (recovered)/charge	-	(13)	-	(13)
Governance costs	641	1070	-	-
Charitable activities	4,851	5,604	-	-
Scanning services	5,864	5,375	5,864	5,375
Decommissioning costs	834	2,003	834	2,003
Total	157,187	150,865	151,276	145,898

* In addition, MRCT Auditor fees totalling £26k (2009/10 - £24k) have been included within other expenditure

10. Research grants

	Group		MRC	
	2010/11	2009/10	2010/11	2009/10
	£000	£000	£000	£000
Research Grants	204,944	173,357	206,453	176,149
Centre Grants	17,206	17,565	17,206	17,565
Collaboration Grants	9,473	19,828	9,473	19,828
Discipline Hopping Awards	1,522	1,659	1,522	1,659
Link Award	146	142	146	142
New Investigator Award	10,181	9,492	10,181	9,492
Trial Grant	18,174	16,599	18,174	16,599
Other	1,252	7,841	1,252	7,841
Total	262,898	246,483	264,407	249,275

11. Other research

Group and MRC	2010/11	2009/10
	£000	£000
Contribution to special research programme	25,878	38,340

12. Postgraduate/training awards

Group and MRC	2010/11	2009/10
	£000	£000
Research studentships/advanced course studentships	33,007	31,876
Post-doctoral fellowships	45,705	46,323
Total	78,712	78,199

13. International subscriptions

Group and MRC	2010/11	2009/10
	£000	£000
International Agency for Research on Cancer	946	835
European Molecular Biology Conference	2,379	2,391
European Molecular Biology Laboratory	13,422	13,439
Human Frontier Science Program	962	939
European Science Foundation	190	208
Total	17,899	17,812

14. Commercial activities

Notes	Group		MRC	
	2010/11	2009/10	2010/11	2009/10
	£000	£000	£000	£000
Income during the year	78,452	81,114	65,847	66,170
Expenditure during the year:				
Staff costs	8 (4,163)	(5,963)	(4,163)	(5,963)
Other expenditure	(25,175)	(23,123)	(29,513)	(23,123)
Total expenditure	(29,338)	(29,086)	(33,676)	(29,086)
Net income for the year	49,114	52,028	32,171	37,084

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

Income and expenditure relating to commercial activities is credited and charged to the Statement of Comprehensive Net Expenditure, with its cumulative balance represented within the general reserve on the statement of financial position.

15. Amounts payable to the Department for Business, Innovation and Skills

Group and MRC	2010/11	2009/10
	£000	£000
Interest earned on the MRC's sterling bank balances	-	20
Excess income earned from commercial activities	17,171	14,968
Surrenderable to the Department for Business, Innovation and Skills	17,171	14,988

Interest earned on the group's sterling bank balances, together with net income earned in excess of £15m on commercial activities are surrendered to the consolidated fund through BIS.

16. Intangible assets

Intangible assets include patents and licences generated by the group's research and also software licences.

GROUP	Patents and Licences	Software Licences	Total
	2010/11	2010/11	2010/11
	£000	£000	£000
At cost or valuation			
At 1 April 2010	250,473	1,948	252,421
Additions	20,780	668	21,448
Disposals	(1,248)	(7)	(1,255)
Revaluation	12,409	0	12,409
31 March 2011	282,414	2,609	285,023

Amortisation

At 1 April 2010	(86,638)	(1,870)	(88,508)
Charge for the year	(27,829)	(400)	(28,229)
Disposals	0	7	7
31 March 2011	(114,467)	(2,263)	(116,730)

Net book value

31 March 2011	167,497	346	168,293
At 1 April 2010	163,835	78	163,913

	2009/10	2009/10	2009/10
	£000	£000	£000
At cost or valuation			
At 1 April 2009	289,726	2,393	292,119
Additions	-	58	58
Disposals	-	(503)	(503)
Revaluation	(39,253)	-	(39,253)
31 March 2010	250,473	1,948	252,421

Amortisation

At 1 April 2009	(62,304)	(2,173)	(64,477)
Charge for the year	(24,334)	(200)	(24,534)
Disposals	-	503	503
31 March 2010	(86,638)	(1,870)	(88,508)

Net book value

31 March 2010	163,835	78	163,913
At 1 April 2009	227,422	220	227,642

16. Intangible assets (continued)

MRC	Patents and Licences 2010/11 £000	Software Licences 2010/11 £000	Total 2010/11 £000
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At cost or valuation

At 1 April 2010	206,074	1,948	208,022
Additions	14,173	668	14,841
Disposals	(1,248)	(7)	(1,255)
Revaluation	18	-	18
31 March 2011	219,017	2,609	221,626

Amortisation

At 1 April 2010	(73,353)	(1,870)	(75,223)
Charge for the year	(20,670)	(400)	(21,070)
Disposals	-	7	7
31 March 2011	(94, 023)	(2,263)	(96,286)

Net book value

31 March 2011	124,994	346	125,340
At 1 April 2010	132,721	78	132,799

MRC	2009/10 £000	2009/10 £000	2009/10 £000
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At cost or valuation

At 1 April 2009	224,934	2,393	227,327
Additions	-	58	58
Disposals	-	(503)	(503)
Revaluation	(18,860)	-	(18,860)
31 March 2010	206,074	1,948	208,022

Amortisation

At 1 April 2009	(54,205)	(2,173)	(56,378)
Charge for the year	(19,148)	(200)	(19,348)
Disposals	-	503	503
31 March 2010	(73,353)	(1,870)	(75,223)

Net book value

31 March 2010	132,721	78	132,799
At 1 April 2009	170,729	220	170,949

17. Property, plant and equipment

GROUP	Land and Buildings ⁽¹⁾	Assets under Construction ⁽²⁾	Equipment and Vehicles	Total
	2010/11	2010/11	2010/11	2010/11
	£000	£000	£000	£000
Cost or valuation				
At 1 April 2010	454,057	154,707	203,241	812,005
Additions	9,003	114,376	18,975	142,354
Disposals	(3,108)	(23,495)	(10,365)	(36,968)
Revaluation	(10,060)	-	9,886	(174)
Impairment	(4,190)	-	-	(4,190)
Reversal of prior year impairment	9,541	-	-	9,541
At 31 March 2011	455,243	245,588	221,737	922,568
Depreciation				
At 1 April 2010	(252,275)	0	(131,481)	(383,756)
Provided during the year	(7,587)	-	(14,029)	(21,616)
Disposals	905	-	8,655	9,560
Revaluation	6,282	-	(6,200)	82
Impairment	824	-	-	824
At 31 March 2011	(251,851)	0	(143,055)	(394,906)
Net book value				
As at 31 March 2011	203,392	245,588	78,682	527,662
At 1 April 2010	201,782	154,707	71,760	428,249

	2011	2010
	£000	£000
The net book value of land and buildings comprises:		
Freehold	50,100	45,373
Long leasehold	145,680	129,813
Short leasehold	7,612	26,597

⁽¹⁾ Property, plant and equipment include £24,398,556 in respect of freehold land which is not depreciated.

⁽²⁾ The seven UK councils had agreed to establish a Shared Services Centre (SSC), to be based in Swindon. EPSRC was acting as host for the SSC on behalf of all councils and was contracted for the development and establishment of RCUK SSC Ltd. This had been capitalised and included in Assets Under Construction as group's contribution towards capitalised systems expenditure. The Asset under construction represented MRC's agreed share 26.98% of the capital costs to date of the research Councils UK Shared Services Centre. On the 29th March 2011 each of the seven Research Councils who were joint investors in the Research Councils UK Shared Services Centre project sold their individual assets in the course of construction which totalled £54million to RCUK Shared Services Centre Limited in exchange for 'B' shares to the same value in RCUK SSC Ltd. MRC's agreed share 26.98% of the capital costs of the project to the date of sale was £14,600,593.

Significant assets included in Assets Under Construction are: £68.4m (2009/10 £57.0m) contribution towards the cost of the UK Centre for Medical Research and Innovation; £171.7m (2009/10 £81.1m) for the new building for the Laboratory of Molecular Biology.

The last five yearly professional revaluation of land and buildings in the UK was performed by Powis Hughes and Associates Chartered Surveyors, an independent valuer, at 1 December 2008. Professional revaluations of land and buildings at the group's Laboratories in The Gambia were also undertaken by the same valuers. Powis Hughes and Associates also undertook professional valuations as at 31 March 2011 of land and buildings located at the Centre for Macaques, Porton Down; Burlington Danes, Hammersmith, London; and the LV Short Building, Penecui. Land and buildings are valued in accordance with the Royal Institution of Chartered Surveyors Valuation Standards (6th Edition), the "Red Book". The LV Short building was valued at Market Value and the others at Depreciated Replacement cost.

Professional revaluation of land and buildings at its research unit in Uganda, are scheduled to be undertaken in 2011/12 by East African consultants; these will accord with the "Red Book" principles as appropriate.

17. Property, plant and equipment (continued)

GROUP	Land and Buildings ⁽¹⁾	Assets under Construction ⁽²⁾	Equipment and Vehicles	Total
	2009/10	2009/10	2009/10	2009/10
	£000	£000	£000	£000
Cost or valuation				
At 1 April 2009	480,450	110,867	212,243	803,560
Additions	5,480	53,130	20,513	79,123
Reclassification	9,054	(9,290)	236	-
Disposals	(937)	-	(34,450)	(35,387)
Impairment	-	-	-	-
Revaluation	(39,990)	-	4,699	(35,291)
31 March 2010	454,057	154,707	203,241	812,005
Depreciation				
At 1 April 2009	258,235	-	148,058	406,293
Provided during the year	8,784	-	13,651	22,435
Disposals	(268)	-	(33,322)	(33,590)
Revaluation	(14,476)	-	3,094	(11,382)
31 March 2010	252,275	-	131,481	383,756
Net book value				
As at 31 March 2010	201,782	154,707	71,760	428,249
At 1 April 2009	222,215	110,867	64,185	397,267

	2010	2009
	£000	£000
The net book value of land and buildings comprises:		
Freehold	45,373	71,170
Long leasehold	129,813	131,481
Short leasehold	26,597	19,564

⁽¹⁾ Property, plant and equipment include £28,120,183 in respect of freehold land which is not depreciated.

⁽²⁾ The seven UK councils have agreed to establish a Shared Services Centre (SSC), to be based in Swindon. EPSRC is acting as host for the SSC on behalf of all councils and has contracted for the development and establishment of RCUK SSC Ltd. £12.9m (2008/09 £10.2m) has been capitalised and inducted in Assets Under Construction as group's contribution towards capitalised systems expenditure.

Other significant assets included in Assets Under Construction are: £57.0m (2008/09 £52.4m) contribution towards the cost of the UK Centre for Medical Research and Innovation; £81.1m (2008/09 £38.4m) for the new building for the Laboratory of Molecular Biology.

The last professional revaluation of land and buildings in the UK was performed by Powis Hughes and Associates Chartered Surveyors, an independent valuer, at 1 December 2008. Professional revaluations of land and buildings at the group's Laboratories in The Gambia were also undertaken by the same valuers. Professional revaluation of land and buildings at its research unit in Uganda, are scheduled to be undertaken in 2010/11 by East African consultants. Land and buildings were valued in accordance with the Royal Institution of Chartered Surveyors Valuation Standards (6th Edition), the "Red Book" and are prepared either on Market Evidence or a Depreciated Replacement cost basis.

17. Property, plant and equipment (continued)

MRC	Land and Buildings	Assets under Construction	Equipment and Vehicles	Total
	2010/11	2010/11	2010/11	2010/11
	£000	£000	£000	£000
Cost or valuation				
At 1 April 2010	447,908	154,707	198,719	801,334
Additions	8,975	114,376	17,761	141,112
Disposals	(3,108)	(23,495)	(9,005)	(35,608)
Revaluation	(10,060)	-	9,886	(174)
Impairment	(4,190)	-	-	(4,190)
Reversal of prior year impairment	9,541	-	-	9,541
At 31 March 2011	449,066	245,588	217,361	912,015
Depreciation				
At 1 April 2010	(251,966)	0	(128,973)	(380,939)
Provided during the year	(7,365)	-	(13,069)	(20,434)
Disposals	905	-	7,295	8,200
Revaluation	6,282	-	(6,200)	82
Impairment	824	-	-	824
At 31 March 2011	(251,320)	0	(140,947)	(392,267)
Net book value				
As at 31 March 2011	197,746	245,588	76,414	519,748
At 1 April 2010	195,942	154,707	69,746	420,395

	2011	2010
	£000	£000
The net book value of land and buildings comprises:		
Freehold	50,100	45,373
Long leasehold	145,680	123,972
Short leasehold	7,612	26,597

17. Property, plant and equipment (continued)

MRC	Land and Buildings 2009/10 £000	Assets under Construction 2009/10 £000	Equipment and Vehicles 2009/10 £000	Total 2009/10 £000
Cost or valuation				
At 1 April 2009	475,111	110,867	207,605	793,583
Additions	4,670	53,130	20,072	77,872
Reclassification	9,054	(9,290)	236	-
Disposals	(937)	-	(33,893)	(34,830)
Revaluation	(39,990)	-	4,699	(35,291)
31 March 2010	447,908	154,707	198,719	801,334
Depreciation				
At 1 April 2009	258,083	-	145,926	404,009
Provided during the year	8,627	-	12,718	21,345
Disposals	(268)	-	(32,765)	(33,033)
Revaluation	(14,476)	-	3,094	(11,382)
31 March 2010	251,966	-	128,973	380,939
Net book value				
As at 31 March 2010	195,942	154,707	69,746	420,395
At 1 April 2009	217,028	110,867	61,679	389,574
The net book value of land and buildings comprises:				
			2010	2009
			£000	£000
Freehold			45,373	71,170
Long leasehold			123,972	126,294
Short leasehold			26,597	19,564

18. Financial Assets

Group Investments	Joint venture UKCMRI Ltd 2010/11	Joint venture RCUK SSC Ltd 2010/11	Investment in Joint Ventures 2010/11	Financial Assets 2010/11
	£000	£000	£000	£000
As at 1 April 2010	-	1,627	1,627	4,675
Additions	8,894	14,601	23,495	11,021
Disposals	-	-	-	(3,504)
Share of losses during the year	-	(1,234)	(1,234)	-
Revaluation	-	-	-	1,053
As at 31 March 2011	8,894	14,994	23,888	13,245

Current asset investments	Total 2010/11 £000
Short term cash deposits	6,508

	2009/10 £000	2009/10 £000	2009/10 £000	2009/10 £000
As at 1 April 2009	-	2,131	2,131	3,129
Additions	-	-	-	2,989
Disposals	-	-	-	(2,627)
Share of losses during the year	-	(504)	(504)	-
Revaluation	-	-	-	1,184
As at 31 March 2010	-	1,627	1,627	4,675

MRC Investments	Joint venture UKCMRI Ltd 2010/11	Joint venture RCUK SSC Ltd 2010/11	Investment in Joint Ventures 2010/11	Financial Assets 2010/11
	£000	£000	£000	£000
As at 1 April 2010	-	1,627	1,627	1,514
Additions	8,894	14,601	23,495	-
Share of losses during the year	-	(1,234)	(1,234)	-
Revaluation	-	-	-	118
As at 31 March 2011	8,894	14,994	23,888	1,632

	2009/10 £000	2009/10 £000	2009/10 £000	2009/10 £000
As at 1 April 2009	-	2,131	2,131	919
Share of losses during the year	-	(504)	(504)	-
Revaluation	-	-	-	595
As at 31 March 2010	-	1,627	1,627	1,514

18a Subsidiaries

MRC Technology Ltd

Medical Research Council Technologies (MRCT) is a company limited by guarantee with charitable status whose principal activity is the management, development and exploitation of the group's intellectual property assets, including its valuable patent rights associated with the production of monoclonal antibodies. It acts as the group's agents in these matters. The charity is governed by a board of trustees, appointments are made by the MRC. The three members are MRC officers and therefore as MRC exerts control over MRCT its results have been consolidated into those of the group.

The members of the Board of MRCT received no remuneration for their services as Trustees from the Company or Group during the year. However, reimbursements for travel expenses with an aggregate value of £713 (2009/10 - £3,980) were made to three members (2009/10 - three members) by the Company. These transactions were carried out on an arms length basis and on normal commercial terms. Trustee Indemnity insurance was purchased in the year at a cost of £2,072 including insurance premium tax.

MRCT is associated with the Medical Research Council and received funding during the year for the management of the MRC patent portfolio and for research purposes as follows: Grant funding of £1,509,000 (2009/10 - £2,792,000); and Management fees of £4,338,000 (2009/10 - £4,338,000).

At the year end, £1,256,000 (2009/10 - £10,793,000) was due from the MRC to MRCT and £1,103,000 (2009/10 - £2,344,000) was due to the MRC from MRCT.

The operating results, assets and liabilities of MRCT are reflected in MRC's financial statements in accordance with IAS 27. The aggregate amount

of capital and reserves at 31 March 2011 was £40,326,000 (2010 - £34,319,000) and the profit for the year was £5,687,000 (2010 - £6,980,000).

18b Joint Ventures

RCUK Shared Services Centre Limited

The seven research councils, working together as Research Councils UK (RCUK) have established a Shared Services Centre (SSC). RCUK Shared Services Centre Ltd was incorporated on 1 August 2007 and has been delivering services to the research councils, since May 2008. Based in Swindon, RCUK Shared Services Centre Ltd provides finance, grants, human resources, information systems, procurement and payroll operational services to each of the research councils and their institutes. The research councils set up the SSC with the aim of reducing spending through sharing and standardising processes.

The investment has been classified as a joint venture between the research councils with the MRC's individual shareholding being 26.98 per cent. In 2007/08, the seven research councils each acquired an A share, carrying a vote per share. B shares convey ownership rights to the holder, including any distributions or proceeds from sale of the SSC.

The research councils entered into a supplementary shareholder's agreement with the Secretary of State for Business, Innovation and Skills on 4th October 2011 to allot the Secretary of State for Business, Innovation and Skills one 'A' ordinary share in the capital of RCUK SSC Ltd. This supplementary agreement confirmed the the covenants of the original shareholder's agreement, signed 8th August 2007, remained extant. On that basis, MRC retain the same level of investment in RCUK SSC Ltd at 26.98 per cent of the Company's 'B' shares.

In March 2011 an asset that had previously been carried in assets under construction was

exchanged for increased share capital in SSC Ltd. Share capital to the value of £14,600,593, (reflecting MRC's share of the completed asset), was issued to MRC to reflect this.

For the period ending 31 March 2011, the audited financial statements for the company

show a loss of £3.4m (2009/10 = £0.5m) against a turnover of £60.5m (2009/10 = £64.8m). The statement of financial position total is £56.2m represented by £62.0m share capital issued to the research councils and £5.8m retained loss.

	A shares	B shares	Total
	£	£	£
As 1 April 2010	1	1,627,815	1,627,816
Additions	0	14,600,593	14,600,593
Share of losses during the year	0	(1,234,395)	(1,234,395)
At 31 March 2011	1	14,994,013	14,994,014
As 1 April 2009	1	2,131,420	2,131,421
Share of losses during the year	0	(503,605)	(503,605)
As at 31 March 2010	1	1,627,815	1,627,816

Hammersmith Imanet Limited

The group holds 25 per cent of the ordinary shares of the company whose deficits were valued at £26.955m at 31 December 2010. The profit and loss account for the period then ended recorded a loss of £23.466m (2009 = £1.736m loss). Hammersmith Imanet Ltd was 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.

MRC recognised its share of the liabilities during 2010/11 given the valid expectation created by HIL's actions prior to the year end. Costs of £847,759 (25% of restructuring and pension liability) have been recognised during the year (2009/10 = £0).

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 group agrees to pay £4,990,000 (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 2011, this amounted to £5,238,436 (2009/10 = £5,335,369).

The investment in Hammersmith Imanet Ltd is shown at nil to reflect the group's share of the company's net liabilities at 31 March 2011.

In February 2011 the company announced notice of their intention to terminate the employment of staff and close the business. MRC have accrued redundancy and pension liabilities of £847,759 accordingly.

Markready Ltd

Markready Ltd a company limited by guarantee of which MRC is one of four members, the other three being Wellcome Trust, Oxford University and Cambridge University, was transferred to MRC during the year. The whole of the business, its property, rights, assets was sold by Markready Ltd to MRC on 9th July for £1. A collaborative

vehicle set up in 2001 to ensure the continued existence of a national primate resource, against a background of real security and supply threats as a result of animal liberation activities. The concern over security, public relations reasons and anonymity considered important at the time of establishment of Markready Ltd, have with the passage of time lessened. The existence of Markready Ltd as a company has come to be seen by all four partners as an unnecessary complication. Agreement was reached amongst the four members that it should be wound up, and ownership and management of the centre transferred to the MRC.

In return for the purchase the MRC agreed to satisfy, fulfil and discharge all debts liabilities in so far as related to the business. Markready was wound up and management control assumed by MRC. The assets transferred included cash, small equipment items and the lease of the building housing the business unit.

The acquisition of Markready was treated as a business combination under IFRS 3. The property was valued by Rafe Staples BSc (Hons), MRICIS acting as the external valuer, on the basis of Existing Use Value calculated by reference to Depreciated Replacement Costs. The Estimated Replacement Costs were calculated by Robert Morfield MRICS in accordance with the RICS Valuation Standards.

Fair Value Consideration	2010/11
	£000
Cash	810
Property Plant & Equipment	7,326
Inventories	465
Gain on acquisition	8,601

All liabilities and receivables of the company were fully discharged prior to transfer.

18c. Other investments

Quoted	Number of shares held	Holding %	Market value at 31 March 2011
			£000
Galapagos NV (Belgium)	59,919	0.47	624
Vectura (formerly Innovata plc)	58,357	0.04	36
Natus Medical Inc (USA)	7,066	0.04	74
Sangamo Biosciences Inc (USA)	165,255	0.54	855
Topo Targets A/S (Denmark)	113,916	0.28	37
Vernalis plc	15,519	0.14	6
Total			1,632

At the close of business on 31 March 2011 the price per share of group's shareholdings listed on

the London stock exchange, the AIM, the Nasdaq and the Danish Stock Exchange were as follows:

Galapagos NV	€11.78
Vectura (formerly Innovata plc)	61.00p
Natus Medical Inc	\$16.80
Sangamo Biosciences Inc	\$8.33
Topo Targets A/S	DKK 2.72
Vernalis plc	39.04p

Private unquoted	Notes	Number of shares held
Anaptys Biosciences Inc.		120,000
Aptuscan		3,209
CMP Therapeutics Ltd		93,600
Bicycle Therapeutics Ltd		72,059
D-Gen Ltd		13,162
Eductus Ltd		6,400
Oxxon Therapeutics Ltd		10,332
Rain Dance Technologies Inc		200,000
Senexis Ltd		10
Heptares Therapeutics Limited		609,577
RCUK Shared Services Centre Ltd A Shares	18a	1
RCUK Shared Services Centre Ltd B Shares	18a	16,732,013
UKCMRI Limited	27	8,894,281

These companies with the exception of RCUK and UKCMRI represent the group's interest in enterprises engaged in the commercial development of group inventions and know how. These equity positions were received in return for company access to the group's intellectual property. The carrying value of unquoted investments cannot be reliably measured, there being no independent market value readily available.

19. Inventories

Group and MRC	2010/11	2009/10
	£000	£000
Consumable stores and livestock	2,912	2,435

20. Trade and other receivables

Group	2010/11	2009/10
	£000	£000
Trade receivables	18,096	13,160
Less provisions for bad debts	(16)	(16)
	18,080	13,144
Other receivables	3,093	3,291
Accrued income	31,286	27,660
Prepayments	21,946	17,931
Total	74,405	62,026

MRC	2010/11	2009/10
	£000	£000
Trade receivables	16,629	15,297
Less provisions for bad debts	(16)	(16)
	16,613	15,281
Other receivables	3,085	3,289
Accrued income	31,286	27,660
Prepayments	17,847	14,732
Total	68,831	60,962

Intra-government balances

At the end of the year, the group had receivable balances with other government bodies totalling £2,781k (2009/10 = £684k) comprising the following: Government Agencies £0k (2009/10 = £52k), Local Authorities £0k (2009/10 = £6k), NHS Trusts and Hospitals £758k (2009/10 = £626k).

21. Cash and cash equivalents

Group	2010/11	2009/10
	£000	£000
Balance at 1 April	45,079	53,243
Net change in cash and cash equivalent balances	22,265	(8,164)
Balance at 31 March	67,344	45,079

The following balances were held at commercial banks , citibank and cash in hand	67,344	45,079
--	--------	--------

MRC	2010/11	2009/10
	£000	£000
Balance at 1 April	30,439	40,805
Net change in cash and cash equivalent balances	23,097	(10,366)
Balance at 31 March	53,536	30,439

The following balances were held at commercial banks , citibank and cash in hand	53,536	30,439
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22. Trade and other payables

Group	2010/11	2009/10
	£000	£000
Due within 1 year		
Trade payables	81,902	78,004
Accruals	133,986	107,674
Other taxation and social security	5,051	4,486
Deferred income	29,775	29,640
Other payables	44,305	16,036
Total	295,019	235,840

Due after more than 1 year		
Trade payable	26	0
Total	26	0

MRC	2010/11	2009/10
	£000	£000
Due within 1 year		
Trade payables	80,824	88,285
Accruals	131,183	106,044
Taxation and social security	3,867	3,435
Deferred income	29,775	29,640
Other payables	44,305	16,036
Total	289,954	243,440

Intra-government balances

At the end of the year, the group had payable balances with other government bodies totalling

£30,578k (2009/10 = £1k) comprising the following: NHS Trusts and Hospitals £210k (2009/10 = £0k), Local Authorities £14k (2009/10 = £1k).

23. Provisions for liabilities and charges

Group and MRC	Early retirements compensation scheme	Redundancy costs	Other costs	Total provisions
	2010/11	2010/11	2010/11	2010/11
	£000	£000	£000	£000
At 1 April 2010	4,766	607	583	5,956
Amount provided in year	2,763	-	-	2,763
Amount expended in year	(1,447)	(607)	(160)	(2,214)
At 31 March 2011	6,082	0	423	6,505
Provisions due within 1 year	1,223	-	-	1,223
Provisions due between 1 and 5 years	2,948	-	423	3,371
Provisions due between 6 and 10 years	1,296	-	-	1,296
Provisions due over 10 years	615	-	-	615
At 31 March 2011	6,082	-	423	6,505

	2009/10	2009/10	2009/10	2009/10
	£000	£000	£000	£000
At 1 April 2009	5,961	1,222	682	7,865
Amount provided in year	576	269	-	845
Amount expended in year	(1,771)	(884)	(99)	(2,754)
At 31 March 2010	4,766	607	583	5,956
Provisions due within 1 year	1,471	-	-	1,471
Provisions due between 1 and 5 years	2,881	607	583	4,071
Provisions due between 6 and 10 years	414	-	-	414
At 31 March 2010	4,766	607	583	5,956

Early retirement compensation scheme

These are legacy Council early retirement obligations. Changes in the tax regime for pensions in 2006 meant it was necessary for early retirement benefits to be paid entirely from the pension scheme. As well as those early retirees, provision is made for where there is a difference (increase) between the maximum value of retirement benefits allowed by the employer at that time and the maximum value of benefits allowed by the pension scheme.

Other

These include provisions for the disposal of High Activity Sealed Sources being used in some units, £423,000 (2009/10 = £423,000);

RCUK Shared Services Centre Ltd

The Research Councils and the RCUK Shared Services Centre Ltd have developed a Shared Services Centre to carry out the central functions of HR, Finance, Grants processing, Procurement and IT across all the Councils. As a result some

councils incurred redundancy costs, particularly where existing staff lived a distance away from Swindon where the Centre is situated.

The Research Councils collectively agreed that they would be jointly liable for all necessary redundancies. The Councils calculated their likely redundancy liabilities in order to make a 2008/09 provision and this was updated as at 31 March

2010. A funding allocation model was developed and agreed by all the Research Councils and this identified the proportion of SSC project spend and liability that each individual Council would incur.

During 2010/11 these provisions were fully utilised as the transfer of services to the SSC Ltd has now been completed.

24. Contingent liabilities

There were no contingent liabilities during the year.

25. Commitments

Capital

The group had estimated future commitments to capital expenditure, which had been contracted but not provided for at the statement of financial position date of £317,025,599 (2009/10 = £160,368,316) comprising the following: MRC

LMB £40,645,599, UKCMRI £259,680,000, MRC Clinical Sciences Centre £2,800,000, MRC Minor Capital £11,900,000 and MRC-University of Glasgow Centre for Virus Research £2,000,000.

Research awards

Forward commitments on research awards:	£000
2011 – 2012	303,189
2012 – 2013	221,048
2013 – 2014	141,030
2014 – 2017	106,311

26. Related party transactions

The MRC is a non-departmental public body sponsored by BIS. For the purposes of International Accounting Standard 24, BIS is regarded as a related party. During the year, the group has had various material transactions with BIS and other bodies for which BIS is regarded as the parent department; namely the Biotechnology

and Biological Sciences Research Council, the Engineering and Physical Sciences Research Council, the Economic and Social Research Council and the RCUK Shared Services Centre Ltd.

The group provides administrative services to the Trustees of two registered charities, The

Medical Research Foundation and The Fleming Memorial Fund for Medical Research, which are therefore regarded as related party transactions. The group provided free resources to the charities in respect of administration, to the value

of £47,789. Two of the Trustees who manage the charities are nominated by the group. During the year, the following material transactions with the group, board and committee members took place in respect of awards funded by the group.

Name	Number of awards	Value (£)
Professor D Ashby	2	3,601,647
Professor D Beech	1	723,476
Professor G S Besra	2	1,566,476
Professor S Bloom	2	3,601,647
Professor J P Brockes	1	1,983,984
Professor I Bruce	1	1,287,740
Professor I Buchan	1	375,856
Professor C Buckley	1	2,376,104
Professor P Burton	3	2,890,436
Professor D Cantrell	1	1,412,000
Professor A Cooke	1	445,312
Professor P Cowen	1	118,180
Professor G Davey Smith	3	3,303,092
Professor C Donaldson	1	322,684
Professor S Downes	1	869,544
Professor G Dunn	1	375,856
Professor J A Endicott	1	1,710,496
Professor B J Everitt FRS	1	2,361,760
Professor S Forbes	1	731,244
Professor K Fox	1	205,220
Professor M Frenneaux	2	3,034,180
Professor J R Geddes	1	1,296,240
Professor U C Goswami	1	1,527,792
Professor K Graham	1	725,340
Professor R Grecnis	1	456,632
Professor G Griffin	1	3,916,368
Professor H M D Gurling	1	902,692
Professor A Hall	1	1,881,156
Professor I Hall	1	1,326,336
Dr T Hanke	1	1,322,832
Professor S E Harding	1	323,316
Professor N Hastie	1	428,344
Professor A V S Hill	2	1,946,956
Professor S Holgate	1	499,728
Professor J Isaacs	1	2,376,104
Professor E J Jenkinson	1	1,969,408
Professor I Jones	1	344,036
Professor S Kapur	2	1,195,564

Name	Number of awards	Value (£)
Professor P M Kaye	1	1,896,188
Professor K Khaw	1	2,127,608
Professor C Kilty	1	741,808
Professor A Knox	2	811,258
Professor D A Lawlor	1	1,604,832
Professor T Lee	1	2,017,056
Professor S W Lewis	1	375,856
Professor J M Lord	1	665,112
Professor M H Malim	2	2,465,220
Professor D McCance	1	895,416
Professor I B McInnes	1	2,376,104
Professor Sir A J McMichael	1	1,322,832
Professor L A R Moore	1	798,324
Professor G Mountain	1	1,185,296
Professor J Nazroo	1	1,850,468
Professor P Parker	1	180,090
Professor S Peacock	2	4,500,800
Professor J D Pickard	1	408,068
Dr S M Ring	2	2,856,448
Professor T Robbins	2	5,861,836
Professor W M C Rosenberg	1	1,608,700
Professor Dame N Rothwell	1	619,268
Professor S Sacks	2	2,171,920
Professor G Smith	1	1,816,372
Dr P Sonnenberg	1	3,916,368
Professor J M Starr	2	1,811,472
Professor R Thakker	1	1,900,004
Professor A M Thomson	1	1,497,784
Professor A Venkitaraman	2	5,185,876
Professor P Wallace	1	551,040
Dr S J Walters	1	1,185,296
Professor N Wareham	1	2,127,608
Professor M K B Whyte	1	295,894
Professor L Wilkinson	1	875,188
Professor B Wren	1	451,168
Professor T Wykes	1	375,856
Professor D Wynford-Thomas	1	500,000

Please note: Where an award is made to more than one related party, the value of the award is counted more than once.

26. Related party transactions (continued)

Research Organisation	Number of awards	Value (£000)
Cancer Research UK	2	890
Professor D T Shima		
Cardiff University	6	3,910
Professor B Duerden	Professor K Fox	Professor A Clarke
Health Protection Agency	1	2,350
Professor M Zambon		
Imperial College London	27	18,000
Professor D Altmann	Sir L Borysiewicz	Professor C Kennard
Professor P Ashton-Rickardt	Professor J S Friedland	Professor R Reynolds
Professor J Allen	Dr R Gunn	Mr O Wells
Professor S Bloom	Professor S E Harding	
King's College London	31	25,120
Professor D Adams	Professor F Kelly	Professor M Morgan
Professor D Armstrong	Professor C Lewis	Professor P Easterbrook
Professor G Bates	Professor S Lovestone	Professor A Purushotham
Professor A P Grieve	Professor M H Malim	Professor S H Sacks
Professor K E Kadler	Professor I Mason	
Professor S Kapur	Professor P McGuire	
Liverpool School of Tropical Medicine	1	1,850
Professor D Laloo		
London School of Hygiene & Tropical Medicine	9	4,140
Professor Sir A Haines	Professor S Lindsay	Professor B Wren
Professor A Ghani	Professor M Petticrew	
Professor D A Leon	Professor R Raine	
Newcastle University	6	4,440
Professor T Cawston	Professor A G Hall	Professor J N Matthews
Professor P A Flecknell	Dr D Lydall	Professor A Thiele
Professor J Goodship	Professor J Mathers	
Queen Mary	7	3,740
Professor J Breuer	Professor N Lemoine	
Professor J Gribben	Professor T MacDonald	
Queen's University Belfast	4	1,700
Dr G Fleming	Professor F Kee	

26. Related party transactions (continued)

Research Organisation	Number of awards	Value (£000)
School of Pharmacy, University of London	1	1,460
Professor P Taylor		
St George's, University of London	6	6,010
Professor A G Dagleish Professor A Steptoe		
The University of Manchester	18	11,540
Professor I Bruce Professor S Downes Professor J Nazroo		
Professor I Buchan Professor G Dunn Dr M Rattray		
Professor J Davis Professor C KIELTY Professor D Ray		
University of Aberdeen	4	3,610
Professor M Campbell Professor V Entwistle Professor F J Gilbert		
University of Birmingham	12	6,430
Professor D Cantrell Professor J Dunn Professor P Stewart		
Professor K Chipman Professor J Lord		
Professor J Deeks Professor P Moss		
University of Bristol	10	6,360
Professor S M Anderton Professor A Hollander Professor N Scolding		
Professor K Fox Professor D A Lawlor Dr K Vedhara		
Professor C Garland Professor A Lingford-Hughes Professor F Windmeijer		
Professor S E Gathercole Professor T Peters Professor D Wraith		
University of Cambridge	31	36,410
Dr J Ahringer Professor P Luzio Professor I White		
Professor A C Ferguson-Smith Professor S O'Rahilly		
Professor D Lomas Professor C W Taylor		
University College London	35	22,940
Professor R Ali Professor C Dezateux Professor M Richards		
Professor T Attwood Professor P J Diggle Professor C Sabin		
Professor S Bevan Professor Y Goda Dr P Sonnenberg		
Dr R Chopra Professor A Hingorani Professor A M Thompson		
Professor D Cutler Professor A Johnson Professor D J Withers		
Dr L V Dekker Dr J Rahi		
University of Dundee	7	4,100
Professor A Anderson Professor A H Fairlamb		

26. Related party transactions (continued)

Research Organisation	Number of awards	Value (£000)
University of Edinburgh	20	21,770
Professor S Forbes	Professor D Price	Professor J M Starr
Professor S G Hillier	Professor J R Seckl	Dr S Wild
University of Glasgow	7	4,680
Professor A Dominiczak	Professor G J Graham	Professor I B McInnes
Dr M Drysdale	Dr D A Greenhalgh	Professor J Mottram
Dr M Girolami	Dr R Insall	Professor J P Pell
University of Kent	2	620
Professor J Baldock		
University of Leeds	5	2,840
Professor W Ahmed	Professor G Mountain	Professor E Roman
Professor D Beech	Professor C Orchard	
Professor E Ingham	Professor S Radford	
University of Leicester	8	5,770
Professor R Quiroga	Professor A Sutton	
University of Liverpool	2	790
Professor J Hill		
University of Nottingham	9	3,480
Professor D Ala Aldeen	Professor S Coombes	Professor I P Hall
University of Oxford	28	30,350
Dr P Aveyard	Professor J Endicott	Professor B Keavney
Professor J P Bolam	Professor R Fitzpatrick	Professor P Matthews
Dr P Borrow	Dr T Hanke	Professor G Rees
Dr R Copley	Professor D Higgs	Professor E Sim
Professor R Cornell	Professor C Holmes	Professor I Tracey
University of Reading	2	510
Professor D J Balding	Professor P Lansley	
University of Salford	1	250
Professor M J Jackson		

26. Related party transactions (continued)

Research Organisation	Number of awards	Value (£000)
University of Sheffield	3	1,890
Professor J Brazier	Professor J P Nicholl	Dr S J Walters
Dr A O Cathain	Professor A North	Professor M K B Whyte
Professor P G Ince	Professor T Skerry	
University of Southampton	2	420
Professor P G Coleman	Professor S Holgate	
Dr D Eccles	Professor I K Temple	
University of Sussex	3	1,330
Professor S Caddick		
University of Warwick	2	1,080
Professor S Thornton		
University of York	4	3,340
Professor M Sculpher		

Related Undertakings

There are a number of companies with whom the group have related undertakings. These are detailed below.

UK Biobank Limited

UK Biobank Limited is a company limited by guarantee and a registered charity. It is a major UK medical research initiative, with the aim of improving the prevention, diagnosis and treatment of a wide range of serious and life-threatening illnesses – including cancer, heart diseases, diabetes, arthritis and forms of dementia. The group is one of the two members of the company, along with the Wellcome Trust and is one of the prime funders of the organisation. UK Biobank Limited is a related party of the group. As the group is one of nine trustees that manage Biobank and it is a charity, the group is not able to exert any control and so the company is not consolidated in these

accounts and its transactions with UK Biobank are expensed as grant payments. Grants payment by the group to UK Biobank Limited during 2010/11 were £5,550,842 (2009/10 = £6,108,118). There were no outstanding balances to / from UK Biobank Limited at the end of the year, or the prior year.

UKCMRI Limited (SPV) and UKCMRI Construction Limited (Conco)

To deliver the proposed UK Centre for Medical Research and Innovation the MRC, in partnership with Cancer Research UK, UCL and the Wellcome Trust, a special purpose vehicle (SPV) to be known as UKCMRI Ltd, has been set up. This entity is designed to allow the delivery of the scientific aims of the joint venture. The four funders signed a Joint Venture Agreement on 9th November 2010 which established UKCMRI as a charity limited by shares, following agreement of the Charity Commission.

Shares in UKCMRI Construction Limited (Conco) the construction company owned by the four partners, of which each partner held one £1 share, were transferred to UKCMRI Ltd upon as part of the JVA. (Conco a design and build vehicle and viewed by group as the device to enable all construction works in advance of the creation of the SPV.) The group's investment in UKCMRI Ltd is represented by a mixture of shares and loans. In considering its relationship with UKCMRI Ltd during 2010/11, until as at such times all loans are represented by shares, the group believe their investment is best represented by issued shares, and as a fixed asset under construction and shown as property plant and equipment in the Statement of Financial Position. Accordingly we have not consolidated the results of UKCMRI Ltd.

During the year the group made loan payments of £13,365,288 (2009/10 = £8,481,301) as part of its funding agreement with UKCMRI Ltd and the other partners. Of which £8,894,280 were converted to shares in UKCMRI Ltd. As at 31 March 2010, the group was owed £20,457,892 (2009/10 £15,986,884) and owed £650,893 (2009/10 =£427,585) to UKCMRI Ltd.

Other significant events during the year included:

- Appointment of the first CEO for UKCMRI.
- Planning permission secured with conditions and S106 contribution agreed.
- Formal approval of the MRC Business Case by BIS

27. Financial Instruments and Derivatives

IFRS 7, Financial Instruments: Disclosures, requires disclosure of the role which financial instruments have had during the period in creating or changing the risks the group faces in undertaking its activities. Specifically: (a) the significance of financial instruments affecting financial position and performance; and (b) the nature and extent of risks arising from financial instruments to which it is exposed. 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 limited role in creating or changing risk on its operational activities.

Liquidity risk

The group'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 group is therefore not exposed to significant liquidity risks.

Interest rate risk

The group has a low level of exposure to interest rate fluctuations; it does not actively seek to invest cash in money markets. Any excess funds held outside of HM Paymaster General banking framework, which could attract interest, are maintained in low level current accounting arrangements, as part of its banking arrangements with Lloyds Banking Group.

Foreign currency risk

The group 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 group 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 £1,104,167 (2009/10 = £1,054,170).

Foreign Currency Balances

Amount	As at 31 March 2011	As at 31 March 2010
USD	£2,474,490	£3,527,864
Euro	£479,750	£8,394,651

A 5 per cent (10 per cent) \pm movement in exchange rates would equate to £147,712, (£295,424), such events would have minimal impact on group's resources. In 2009/10 the corresponding amounts were £624,513 (£1,192,252).

Receivables and creditor risk

Financial assets and liabilities are held at fair value and changes in values are recognised in the Statement of Comprehensive Net Expenditure. The fair value of the group's financial assets and liabilities are equivalent to the carrying amount unless stated above. The group 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 group in undertaking its activities. Of current outstanding trade debt less than 13 per cent is greater than 30 days old (2009/10: 7 per cent).

Interest on Pension Scheme Liabilities.

There is an interest cost associated with the liabilities on the pension scheme. Movements are subject to changes in assumptions about discount rate between years, and the value of pension obligations. These are offset by the expected return on pension scheme assets, and in so far as liabilities are matched by assets, the exposure of MRC to this particular type of risk is considered low. Note 8e refers.

28. Events after the reporting period

IAS 10 events after the statement of financial position date requires the disclosure on the date on which the financial statements were authorised for issue and who gave that authorisation. The accounts were authorised for issue by the Accounting officer on the 29 March 2012. The financial statements do not reflect events after this date.

Hammersmith Imanet Ltd (HIL)

During the year HIL notified MRC subject to shareholder agreement of its proposal to terminate employees by way of redundancy cease

business activities. The resolution to dissolve the company was passed on 13 May 2011.

The Subscription and Shareholders Agreement contains a PUT option (in MRC favour) which if exercised would require GE Healthcare to purchase MRC's shares for £3m plus interest; and a CALL option for GE Healthcare to purchase MRC's shares for same amount. MRC exercised its PUT option on 6 May 2011 and a sum of £3,450,808 (£450,800 interest) was paid to it.

New partners accession to CRICK Institute.

The Original Founders and UKCMRI entered into a joint venture agreement on 9 November 2010 for the purpose of establishing and operating the Crick Institute. Kings College London and Imperial College of Science Technology and Medicine have become New Participants in the JVA. A Deed of accession varying the original joint venture agreement accordingly was signed by all partners (existing and new) on 11 October 2011. Each of the New Participants has agreed to make an overall contribution of £40,000,000 towards the project, and initially intend to become the holders of Shares by way of subscription. The new partners will contribute to building lifecycle works i.e. capital replacement of assets which are integral to the building such as mechanical, electrical, digital and fabric assets.

Valuation of Non Current Asset - National Temperance Hospital Site.

The proceeds of the sale of this site will go towards funding of the Crick Institute. After the reporting period, MRC began actively marketing the site. Valuation indicators arising from this exercise have been considered to be an adjusting event after the reporting period in regards to the asset's carrying value. The asset has been revalued from £15.7m to £28m. These movements are reflected within the financial statements. Although the site is now being actively marketed, those activities in themselves did not constitute reclassification as an asset held for resale at reporting date.

Transfers of business to University Sector.

Two major business re-organisations took place after the reporting period. Following the closure of the Medical Research Council Human Reproductive Sciences during the year, 22 staff and assets to the value of £3.2m net book value were transferred, in furtherance of a new research centre in conjunction with the University of Edinburgh, to be known as MRC Centre for Reproductive Health. The new Medical Research Council (MRC) Centre for Reproductive Health has been awarded to the University of Edinburgh to further research into conditions that affect reproductive ability and the health of male and female reproductive organs including infertility, endometriosis and premature birth. The new £1m Centre grant is in addition to £12m of research programme grants recently awarded by the MRC to leading reproductive health scientists in Edinburgh. The Centre will host these major groups as well as an innovative training programme for aspiring reproductive scientists.

More than 200 staff and students from the Medical Research Council Human Genetics Unit joined the University of Edinburgh to form one of the largest centres for human genetics and molecular medicine in Europe. The newly strengthened Institute of Genetics and Molecular Medicine (IGMM) will aim to deliver clinical benefits directly to patients suffering from a variety of diseases including brain and eye disorders, cystic fibrosis and childhood and adult cancers. Assets with a net book value of approximately £9.9m were transferred in support of the IGMM.

MRCT Ltd

MRCT changed its governance structure, adopting new articles of association effective 31 January 2012. Up until that point, the Chairman of the Board was the MRC Deputy Chief Executive and other MRC senior managers were members of the board. Following the reorganisation of MRCT's governance arrangements, MRC has the right to appoint only one Board member (Director) out of a total of no less than five and normally not more than ten Directors. These changes ensure that the Chairman of the Board of Trustees and a majority of the Trustees will no longer be MRC employees and are independent of the MRC. Following these changes MRCT will no longer form part of the group statement, as there is no control or significant influence exerted by MRC .



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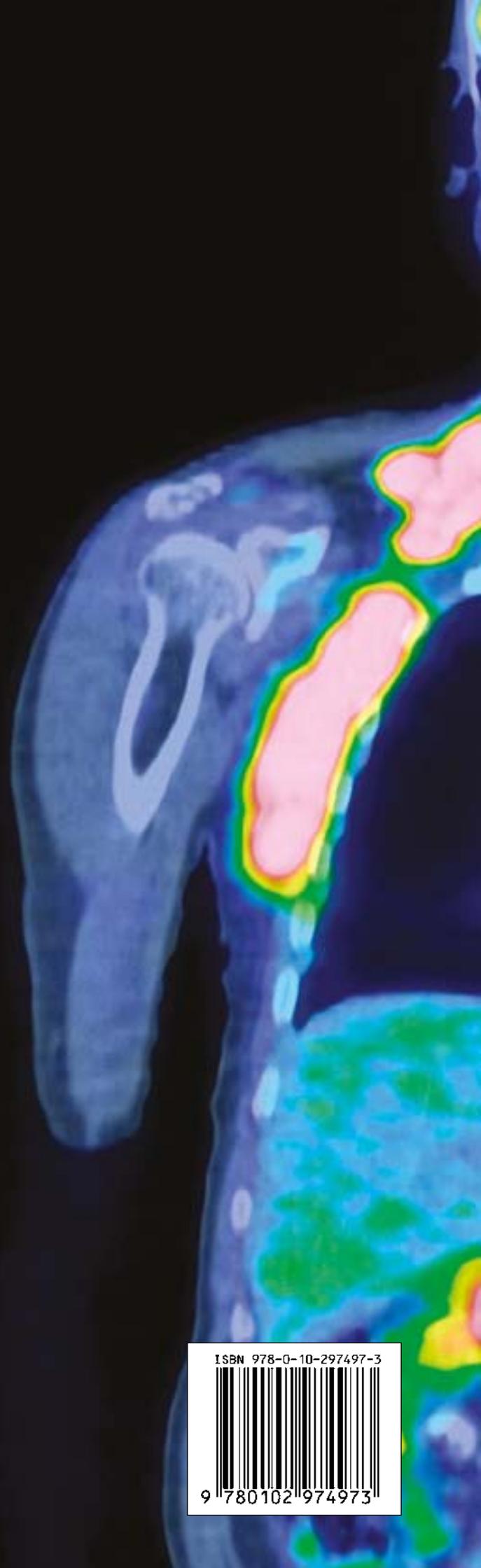
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