Leading science for better health

MRC Medical Research Council

Medical Research Council
Annual report and accounts 2013/14

Medical Research Council

Annual Report and Accounts 2013/2014

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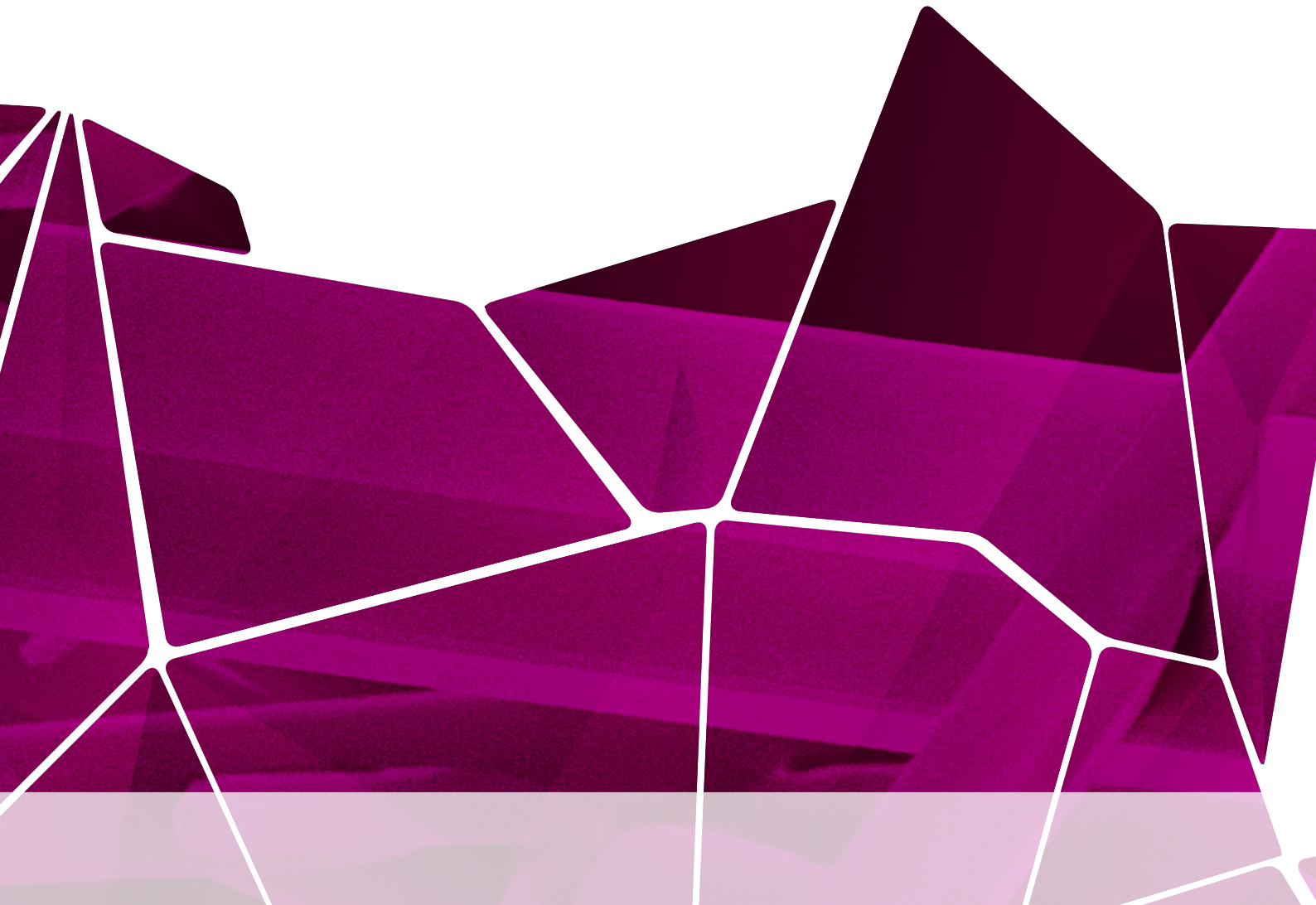
Caffeine crystals. Coloured scanning electron micrograph (SEM) of anhydrous caffeine crystals (1,3,7-trimethylxanthine). They were produced by a process called sublimation. A liquid containing caffine, such as coffee, is frozen and heated to 238 degrees Celsius, causing the frozen liquid to vaporise without going through the liquid phase. The vapour is then condensed, which drives the water out and results in anhydrous crystals. Some of the crystals have symmetrically intergrown (upper centre, red and yellow). Caffine stimulates the central nervous system (CNS), increasing alertness and deferring fatigue. It occurs in coffee beans and tea leaves. Magnification: x400 at 10 centimetres high.

Foreword



Foreword from the Chair

Donald Brydon

2013/14 has been another exciting and challenging year for the MRC. In my first full financial year as Chairman, I was honoured to chair the organisation while it marked its 100-year anniversary. June 2013 was 100 years since the establishment of the MRC's forerunner, the Medical Research Committee and Advisory Council; throughout the year we have been looking back on all that we have achieved in the past century – and all that we might in the next. You can read more about our Centenary programme of events on page 34.

The MRC can be proud of its achievements in the past 100 years, but we must not be complacent; planning for the future remains essential. Integral to this planning is the MRC's refreshed strategic plan *Research Changes Lives 2014-2019*, launched in December 2013, which will guide our decisions over this period. *Research Changes Lives 2014-2019* continues the MRC's strategic direction, building on strengths and achievements and further developing our aspirations and commitments to securing impact from our research. It maintains the overarching high-level strategic aims of the previous plan which have served us so well, along with a set of refreshed objectives to achieve these aims. These objectives have been updated in the light of new scientific opportunities and potential for impact, and in consultation with MRC research boards, overview groups, panels, directors and fellows, industry colleagues, and scientific workshops, research councils, the Academy of Medical Sciences and the Association of Medical Research Charities.

Encouraging academic and industry researchers to work together, and supporting translational research, are central to our refreshed strategic plan. Fruitful collaborations between university researchers and life sciences companies can occur when scientific excellence in an area is at a critical mass – for example, the Division of Signal Transduction Therapy in Dundee is a pre-competitive collaboration on kinases involving five global companies, the MRC Phosphorylation and Ubiquitylation Unit and the University of Dundee. We are proposing to pursue a 'Proximity to Discovery' model in which we encourage researchers from industry – whether small biotechs or large pharma companies – to co-locate with discovery R&D infrastructure. We envisage our role to be aiding communication and agreements between groups, and funding a diverse range of collaborative opportunities.

In 2010 the Government undertook a full spending review, maintaining the MRC's resource budget in real terms between 2011/12 and 2014/15 – a positive outcome in these constrained times. In 2013 the Government undertook a spending review to determine budgets for the 2015/16 financial year into the next Parliament. The MRC worked closely with Research Councils UK and other science organisations to demonstrate the value of medical research to the health of the UK population and to our economy.

In February 2014 the Government announced budget allocations for 2015/16 within the science ring fence. The MRC's resource allocation – our day-to-day spending on science – was slightly more than anticipated, and we also received a substantial increase in our capital allocation to £36m for 2015/16, some 16 per cent higher than the previous year. All in all, this outcome was better than we might have feared and, although there will be challenges in maintaining the strength of medical research in the UK, I have every faith that we are on the right path to do so.

I cannot conclude my comments without a mention of the Francis Crick Institute (see page 37), progress on which has remained strong this year. The institute, due to open in 2015 and in which the MRC is a founding partner, launched its strategy in June 2013. The building was also topped out in June, cementing its place on the London skyline.

Finally, I record my gratitude for the hard and inspiring work of Sir John Savill, his team, Council members and all those who collaborate so fruitfully with the MRC.

Donald Brydon CBE

Foreword from the Chief Executive

Sir John Savill

I can't begin to reflect on 2013/14 without mentioning the MRC's Centenary year. During 2013 we marked our achievements of the past 100 years with a range of events, from events for our partners and stakeholders to opening up MRC research to the public. One of my most enjoyable parts of the Centenary year was touring all but one of the locations where the MRC has an institute or unit (I went to The Gambia in 2012). In each location I delivered a presentation about the history of the MRC and some of our many achievements. But for me the most valuable aspect was speaking to MRC-funded researchers about what they think are the research priorities of the future.

Many of their hopes for the future chimed with mine. One was how we can secure economic impact from publicly-funded research. Once again, the MRC has made significant progress on working with industry partners in 2013/14, delivering on commitments made in the Government's 2011 Life Sciences Strategy. Building on the success of the MRC/AstraZeneca Mechanisms of Disease initiative, we met with a dozen pharmaceutical companies in early 2014 to agree the establishment of a library of their assets for experimental studies (see page 33). The TSB/MRC Biomedical Catalyst (see page 32) has gone from strength to strength in the financial year, as has our Stratified Medicine Initiative (see page 33). Industry will also be key partners in research funded via the new Antimicrobial Resistance Funders Forum, established by the MRC in 2013/14 (see page 33).

Working together, particularly in geographical locations, is the central component of our proposed Proximity to Discovery model, already mentioned by the Chairman in his foreword. Co-location of infrastructure and aligning priorities with industry will be an important part of our Enhancing the UK's Clinical Research Capabilities and Technologies initiative, launched in 2013/14 (see page 37). With a £150m injection of capital from the Department of Health, the initiative will see us work with a range of medical research funders and industry partners to provide the technology needed for next-generation clinical research, from advanced body-imaging techniques to studying the intricacies of cells, tissues and organs. This capital is in addition to our capital allocation for 2015/16, an increase on the year before, and to me a demonstration of the excellent case we have made for the central importance of funding medical research.

It has also been a significant year for biomedical and health informatics. In 2013 we built on the multi-funder Health Informatics Research Centres with £20m from the MRC to create the Farr Institute of Health Informatics Research (see page 36) and put the UK at the forefront of gaining insights from patient records, biological data and associated routinely collected information, in a secure environment. Aligned with this, we committed £39m to biomedical informatics research, funding six strategic awards which will develop both facilities and training opportunities.

We have made progress in 2013/14 with our programme to roll out our university units model of research funding, working with six universities (Cambridge, Dundee, Glasgow, Oxford, Southampton and UCL) to successfully transfer 11 more MRC units to university units. We also created our second university unit from scratch – the MRC Integrative Epidemiology Unit at the University of Bristol, which grew out of the MRC Centre for Causal Analyses in Translational Epidemiology (page 22). University units are a dynamic and effective way for us to fund science, and I look forward to seeing research flourish in the transferred and new units.

Sir John Savill

Caffeine crystals. Coloured scanning electron micrograph (SEM) of anhydrous caffeine crystals (1,3,7-trimethylxanthine). They were produced by a process called sublimation. A liquid containing caffine, such as coffee, is frozen and heated to 238 degrees Celsius, causing the frozen liquid to vaporise without going through the liquid phase. The vapour is then condensed, which drives the water out and results in anhydrous crystals. Some of the crystals have symmetrically intergrown (upper centre, red and yellow). Caffine stimulates the central nervous system (CNS), increasing alertness and deferring fatigue. It occurs in coffee beans and tea leaves. Magnification: x400 at 10 centimetres high.

The MRC in 2013/14

The MRC in 2013/14

The MRC is a publicly funded organisation dedicated to improving human health. We support research across the entire spectrum of medical sciences, in universities, hospitals and in our own research units and institutes across the UK and 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; the Technology Strategy Board; industry; the academic and charity sectors; and of course the public.

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.
- Promote dialogue with the public about medical research.

This annual report to Parliament describes our progress in meeting our aims and objectives between 1 April 2013 and 31 March 2014 highlighting key initiatives and partnerships. Each year's scientific achievements are described in more detail in our online annual review and other publications available from the MRC website at **www.mrc.ac.uk/Newspublications/Publications**

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.

In 2009 we published a 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. In 2013 we published a refreshed strategic plan, *Research Changes Lives 2014-2019*, which continues our strategic direction, building on our strengths and achievements and also takes into account new scientific opportunities to secure tangible impact from MRC research.

MRC strategic aims:

- Picking research that delivers: setting research priorities which are most likely to deliver improved health outcomes (see page 30).
- Research to people: bringing the benefits of excellent research to all sections of society (see page 32).
- Going global: accelerating progress in international health research (see page 35).
- Supporting scientists: sustaining a robust and flourishing environment for world-class medical research (see page 36).

Our allocation from Government for 2013/14 was agreed under the 2010 Spending Review. The *MRC Delivery Plan 2011/12 – 2014/15* details the MRC's spending priorities and intended activities for the spending review period. It describes how the MRC will use its resources to achieve its mission and contribute towards the Government's objectives for the science budget. Progress in implementing the delivery plan and achievements against the milestones are monitored routinely by MRC Management Board. Progress is reported to Council and, via biannual meetings, to BIS. A summary of this progress is included in the subsequent annual delivery plan reporting framework document, which also sets out which areas of the MRC's activity will be reported on in detail over the next year. The delivery plan reporting framework for 2013/14 is available on the MRC website at **www.mrc.ac.uk/Newspublications/Publications/DeliveryPlan/index.htm**

The MRC also reports annually on the outputs, outcomes and impact of MRC research. Further information on these reports is available at **www.mrc.ac.uk/Achievementsimpact/Outputsoutcomes/index.htm**

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. The Governance Statement in the Accounts (page 69) provides information about Council's membership, performance and attendance. Information about the Council's subcommittees is also contained within the Governance Statement.

Facts and figures

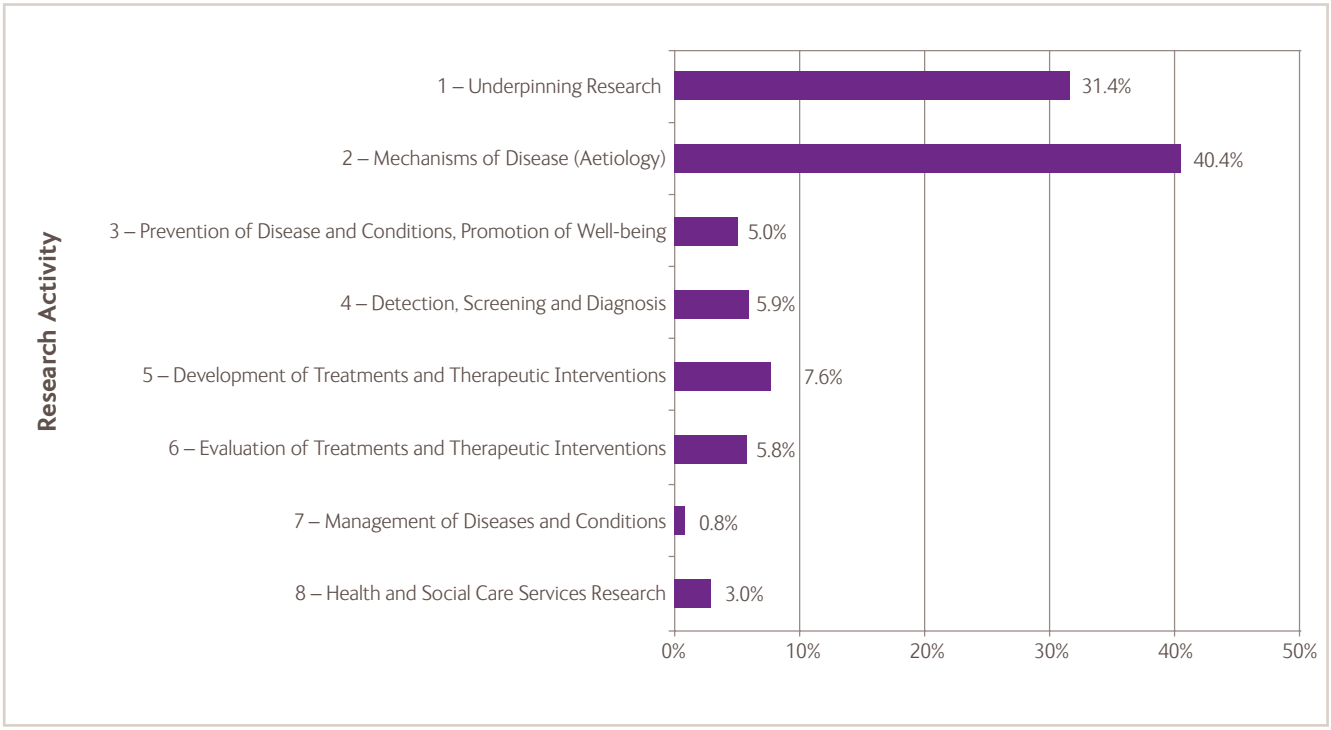
In 2013/14 the MRC's gross research expenditure, which is funded by a budgetary allocation from BIS together with grants and contributions from external bodies and other government departments, was £845.3m compared to £766.9m in 2012/13. The support for world-class medical research to improve human health and enhance the economic competitiveness of the UK included:

- £332.3m on grants and to researchers in universities, medical schools and research institutes
- £328.0m on programmes within the MRC's own units and institutes including £7.0m on studentships
- £104.4m on programmes within university units, including transfer of property, plant and equipment with a net book value of £29.2m
- £62.9m on studentships and fellowships in universities, medical schools and research institutes; there were approximately 1440 postgraduate students and 390 fellows in March 2014
- £17.7m for international subscriptions

The following figures show:

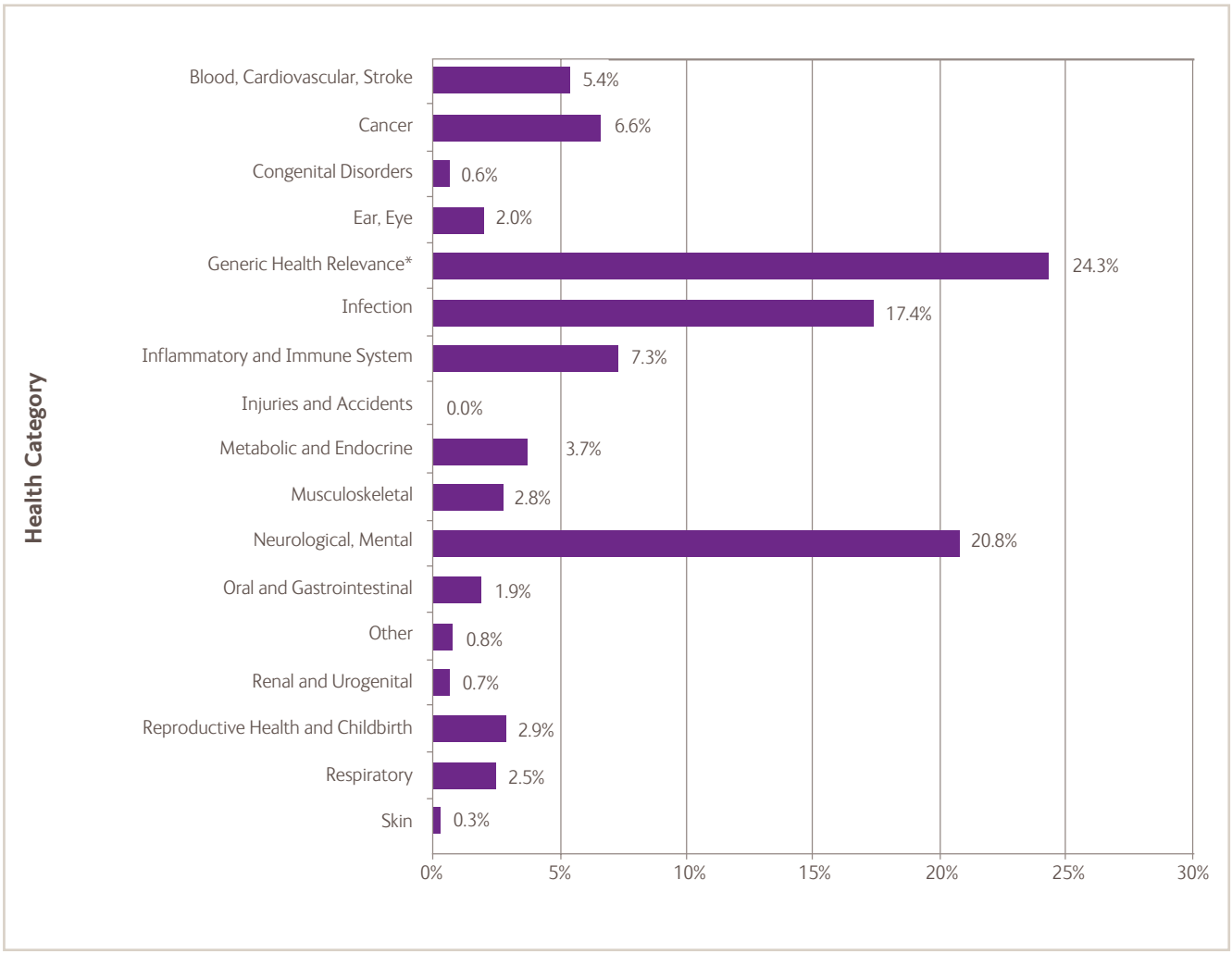
1. A breakdown of MRC research spending in 2013/14 by research activity
2. A breakdown of MRC research spending in 2013/14 by health category
3. Commitment to new grants each year since 2004/05

Figure 1: Estimated research programme expenditure by activity



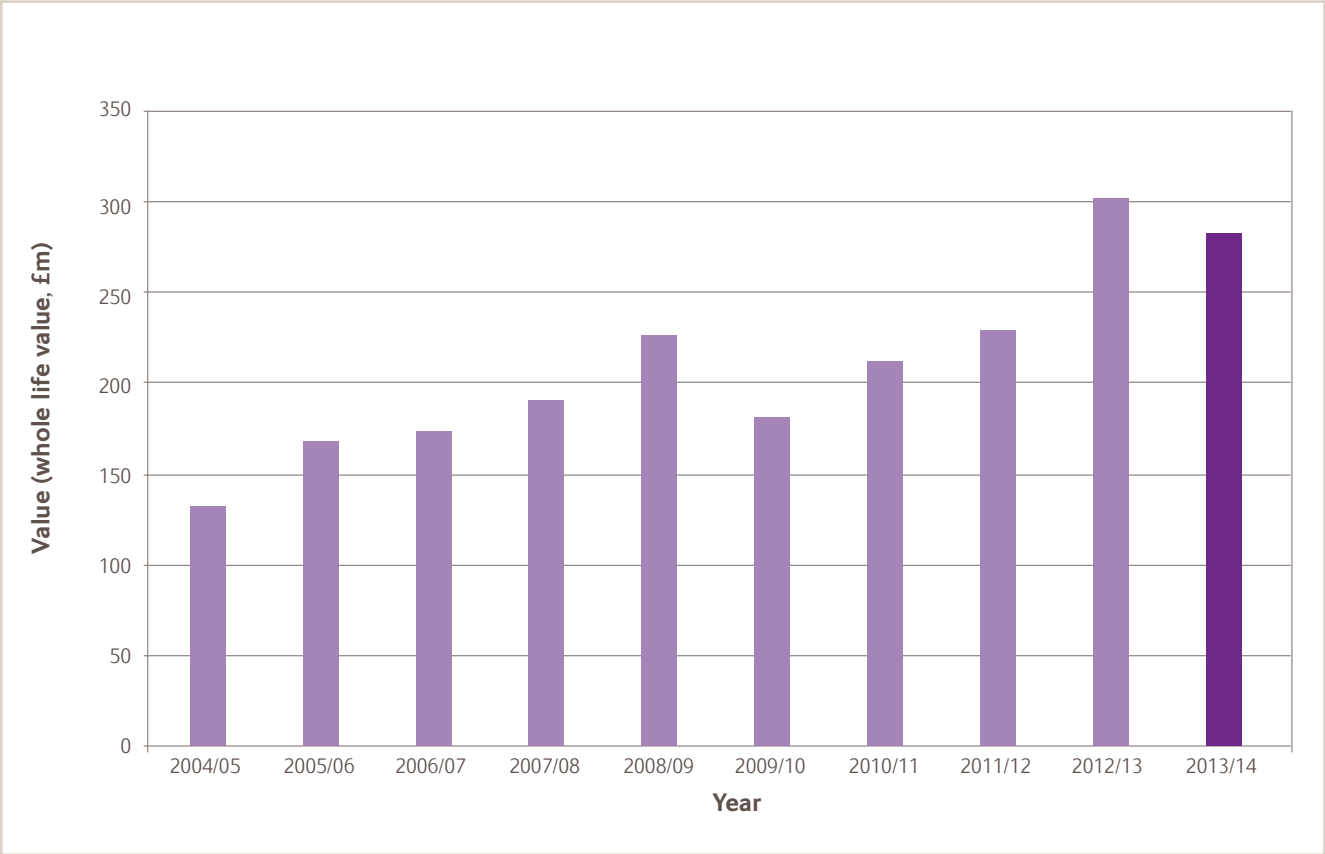
Includes profiled payments for grants and fellowships in the 2013/14 financial year and unit projects with spend in 2012/13

Figure 2: Estimated research programme expenditure by health category



*Generic Health Relevance – This covers research, often looking at the control and/or dysfunction of fundamental cellular and physiological processes, which contributes to research in multiple disease areas. In particular, this domain provides a significant underpinning for more focused research on cancer.

Figure 3: New grant commitment over the past decade, by financial year



Grant funding

Decisions were made on more than 1360 grant applications during 2013/14. 306 awards were made, leading to the commitment of £282m for new research. The average success rate for the year is just under 21.6 per cent which is in line with the nine year average (2004/05 to 2012/13) of 22 per cent.

The MRC awards funding in both responsive mode and managed mode:

Responsive mode is for unsolicited research proposals submitted to the research boards as well as standing research panels. Such applications may be made by anyone eligible to apply to the MRC for funding at any time and in any field of research relevant to the MRC's remit.

Managed mode proposals are submitted in response to specific calls for proposals and targeted funding mechanisms. They will usually include detailed eligibility criteria and often a call for full proposals will be preceded by a call for outline proposals. These are one-off calls which will be focused on a key strategic area, and which may be assessed by specially convened review panels.

The following funding decisions were made in 2013/14:

- 199 research grants, totalling £140.5m, were funded through our four research boards shown in table 1 below
- 107 awards were made, totalling £141.3m through the Calls and Panels in table 2 below. They reflect a managed application process whereby the schemes typically operate a two-stage process involving an outline stage or proactive engagement with applicants to ensure a good fit to the call criteria.

Table 1

Boards	Number of applications	Awarded	Success rate (%)	Total amount awarded (rounded whole life values) £m
Infections and Immunity Board	235	47	20%	27.0
Molecular and Cellular Medicine Board	288	51	18%	43.6
Neurosciences and Mental Health Board	288	44	15%	33.6
Population and Systems Medicine	256	57	22%	36.3
Grand total	1067	199	19%	140.5

Table 2

Calls and panels	Total amount awarded (rounded whole life values) £m
African Research Leader Scheme	2.2
Biomedical Catalyst: Regenerative Medicine Research Committee	2.7
Centres of Excellence in Neurodegeneration Research	0.4
Dementias Research Platform	12.1
Developmental Pathway Funding Scheme	29.9
Global Health Trials	17.8
Health Informatics	1.5
Joint Health Systems Research Initiative	0.8
Joint Programme – Neurodegenerative Disease Research	2.8
Lifelong Health and Wellbeing	2.0
Medical Bioinformatics	34.3
Methodology Research Panel	8.6
MRC Brain Banks	4.8
Stratified Medicine	9.0
Systems Immunology	4.0
UK Regenerative Medicine Platform*	8.2
Grand total	141.3

* A further £20m of capital funding from the MRC will provide state-of-the-art facilities and equipment to support the work of the UKRMP and the wider regenerative medicine research community.

Fellowship funding

327 fellowship applications had a final decision made during 2013/14 and 86 awards were made, committing just over £40m as shown in table 3 below.

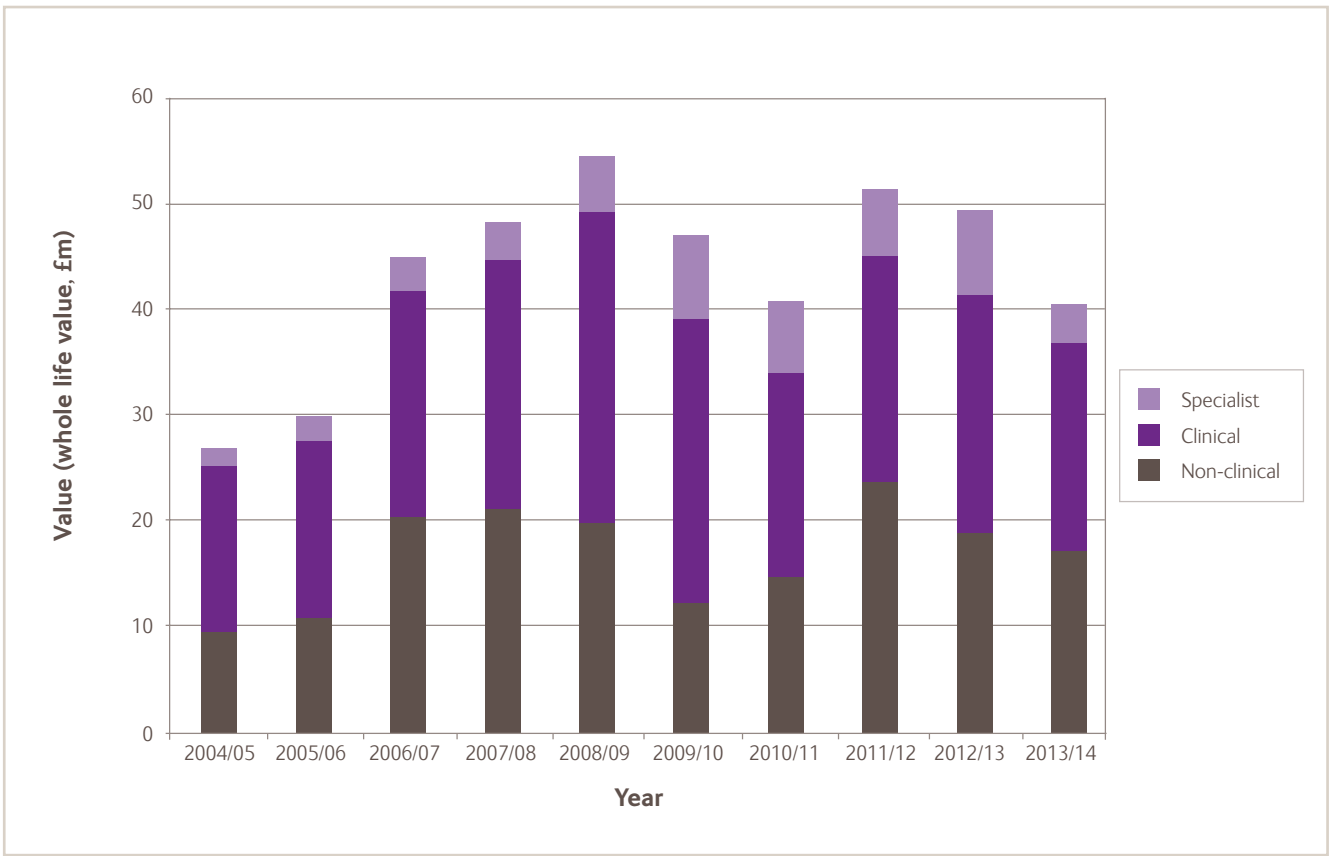
The range of fellowship award schemes covers both clinical and non-clinical researchers, with opportunities in quantitative and qualitative research methodologies provided by the Specialist Fellowship Schemes.

The overall success rate was 26 per cent which is a three per cent increase on the 2012/13 rate of 23 per cent.

Table 3

Fellowship type	Number of applications	Awarded	Success rate (%)	Total amount awarded (rounded whole life values) £m
Clinical	157	53	34%	19.7
Non-clinical	114	18	16%	17.2
Specialist	56	15	27%	3.6
Grand total	327	86	26%	40.4

Figure 4: New fellowship commitment over the past decade, by financial year



Studentship portfolio

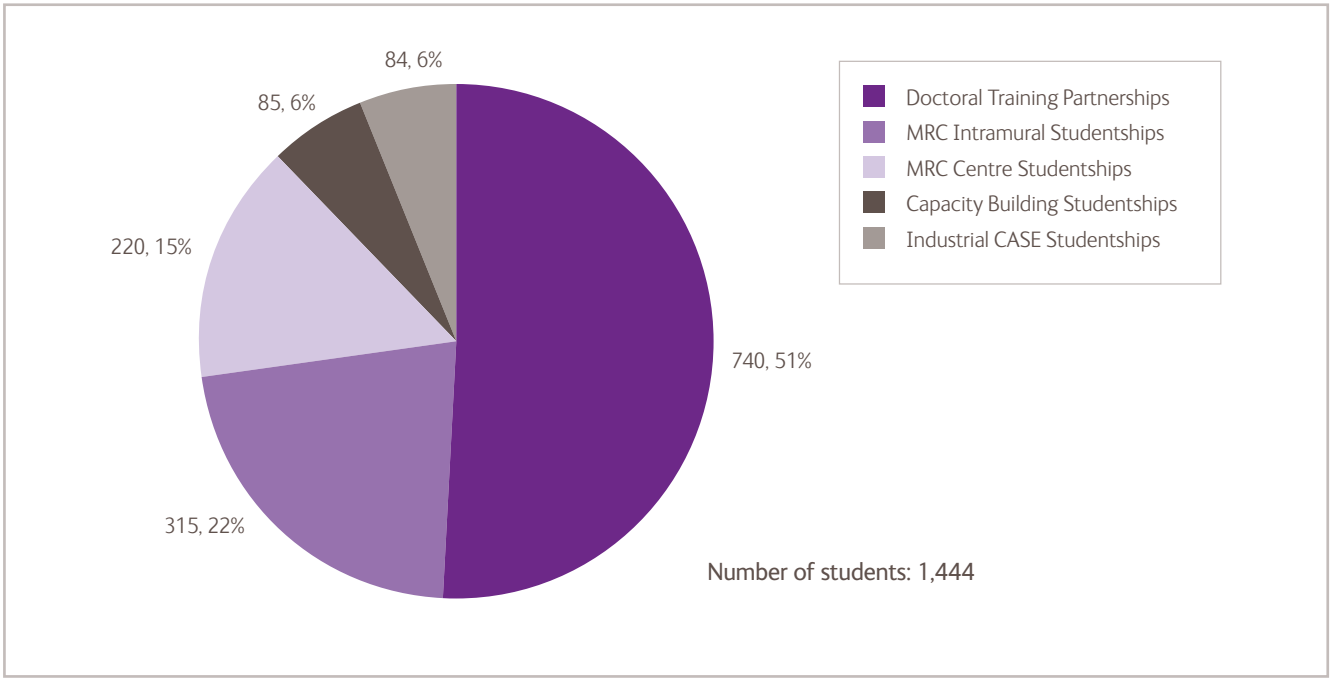
The largest proportion of MRC studentship funding is provided through Doctoral Training Partnerships with universities. Sixteen universities in the UK receive a grant for PhD studentships based on their success at gaining grant income from the MRC; the more grant income, the more PhD students the university receives funding for. A further eight universities successfully competed for a studentship allocation in 2011 for the 2012-2015 intake of students. This includes an extension of one year from the original dates for the DTP allocations so the funding is now allocated until 2015. Doctoral Training Partnerships are underpinned by an agreement to ensure that PhD students receive the highest quality provision, that studentships fulfil both the university's and the MRC's priorities, and that we can monitor the outcomes of MRC investment, all the while maintaining flexibility for the universities in how they deploy their PhD students.

The partnerships now incorporate capacity building in areas of scarce strategic skills, and students in capacity-building areas will no longer be funded separately. Partnerships are complemented by Industrial CASE studentships, with 30 individual awards made in 2013/14 for students to be trained in mutually-beneficial collaborations between academic and non-academic partner organisations.

We also align studentship training to our strategic investments, with 27 MRC units (11 intramural units and 16 university units), three institutes and 24 MRC centres.

The pie chart below shows the breakdown of the MRC studentship population in March 2014.

Figure 5: Number of MRC students March 2014



Institutes, units and centres

The MRC's large-scale investments include three institutes, 27 units (including 16 MRC university units and two research units in Africa) and 24 centres and related charity partnerships. All institutes, units and centres are reviewed every five years.

In addition, the MRC has a portfolio of strategic partnerships and hubs including five UKCRC Public Health Research Centres, the Scottish Collaboration for Public Health Research and Policy, the Research Complex at Harwell, six methodology hubs, four high-throughput hubs and four informatics centres, added to in 2013 by the Farr Institute for Health Informatics Research.

During 2013/14, the quinquennial review (QQR) process for units (intramural and university units) and institutes was scrutinised to see if the reviews addressed the right questions and decisions clearly and effectively, and if the work and time needed to carry out the reviews could be reduced. Consultations[1] with relevant stakeholders established that the review process is basically sound. The process conforms with the recent Cabinet Office document *Additional Guidance for Reviews of Public Sector Research Establishments* (2013).

Changes approved by the MRC Council in October 2013 included:

- Reviews should be tailored more to the stage of development and distinct mission of a unit. QQRs' scrutiny of strategic issues about the future of a unit should also vary; in some cases being the MRC's main way of addressing these questions, in others having a mandate that is more limited.
- Scientific programme assessments and funding decisions should remain different from grant reviews, but could be made more consistent and objective.
- QQRs should concentrate on units' strategy; units' research and training; and level of core resource. Public engagement assessments which do not need top level scientific input, operational questions, and assurance/compliance checks are better handled separately.
- Review subcommittees and boards need more support in assessing/deciding on the level of resources needed.
- Procedures should be leaner and less prescriptive, and the office should do more to organise and support reviews, and to reduce the information load.

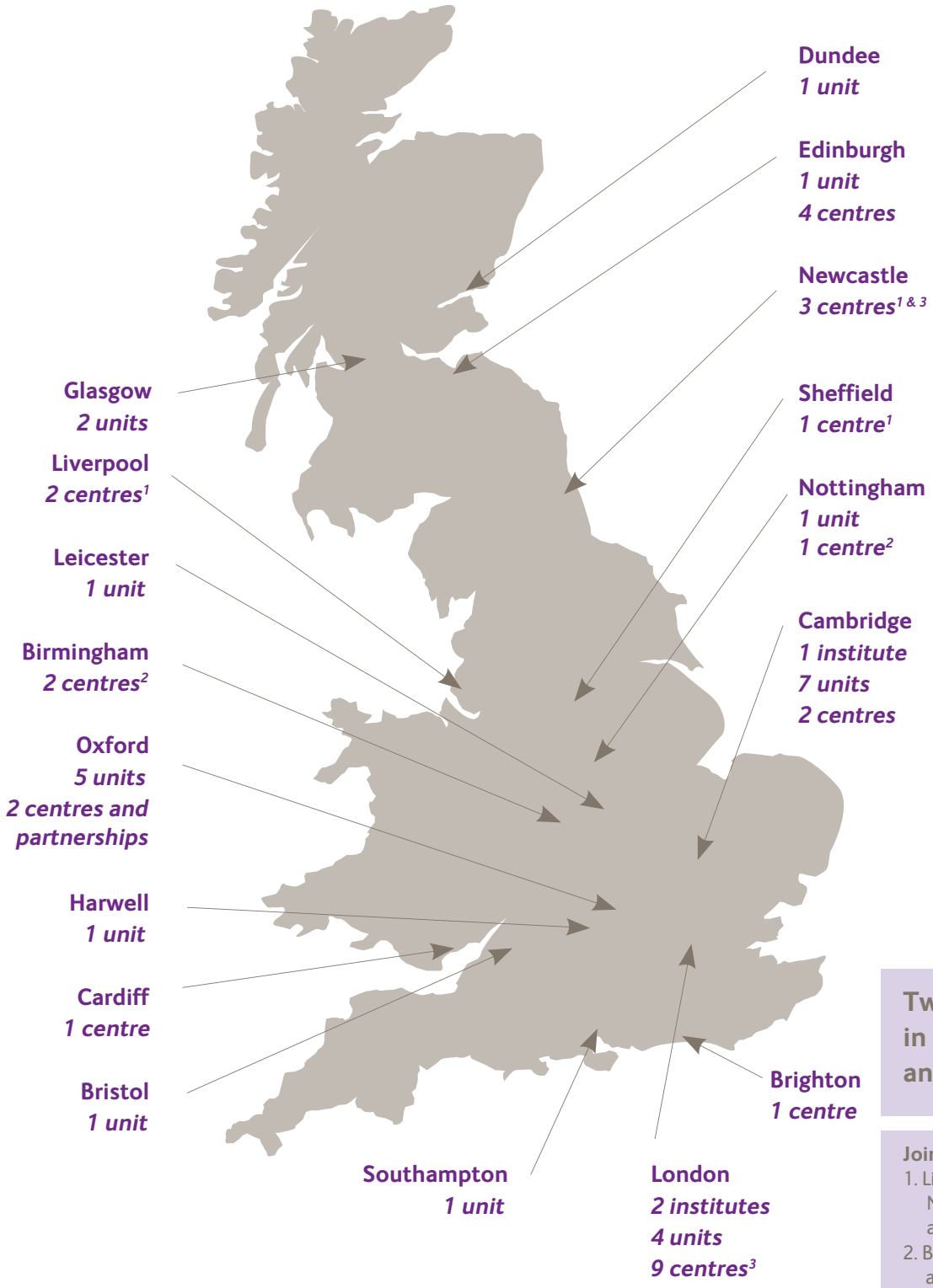
These recommendations will be implemented for all reviews taking place in 2014/15 onwards.

Significant activities during 2013/14 included:

- Developing and strengthening partnerships, for example:
  - Working with six universities (Cambridge, Dundee, Glasgow, Oxford, Southampton and UCL) to successfully transfer 11 MRC units to university units.
  - Establishing two de novo university units with Bristol and Cambridge Universities.
  - Reviewing and renewed funding for five years for the Research Complex at Harwell (a joint venture of the UK Research Councils (RCUK) and Diamond Light Source).
  - Renewed three years' funding for the UK Stem Cell Bank.

1. People and organisations consulted include: Research Board Chairs and a sample of other board members; unit directors; Management Board; office staff dealing with science programme management and other areas; Strategy Board; universities hosting university units; senior unit administrators; trade union side; and MRC staff.

Figure 6: The MRC's large-scale research investments as at 31 March 2014



Two MRC units in The Gambia and Uganda

Joint centres
1. Liverpool, Newcastle and Sheffield
2. Birmingham and Nottingham
3. UCL and Newcastle

- New five-year programmes approved for three units [Biostatistics Unit, Cambridge (under a new director); Cognition and Brain Sciences Unit, Cambridge (under a new director); MRC/CRUK/BHF Clinical Trial Services Unit, Oxford].
- New five-year funding approved for five centres [University of Edinburgh Lifelong Health and Wealth (LLHW) Centre for Cognitive Ageing and Cognitive Epidemiology; Centre for Drug Safety Science, Liverpool; MRC/DH Centre for Environment and Health, UCL; MRC Centre for Neuropsychiatric Genetics and Genomics, Cardiff; University of Newcastle LLHW Centre for Ageing and Vitality].
- Closed two centres ['CRUCIBLE' Centre in Ageing Research, UCL; MRC Centre for Developmental and Biomedical Genetics in Sheffield] and developed two others into university units [the MRC Centre for Causal Analysis in Translational Epidemiology (CAiTE) in Bristol became the MRC Integrative Epidemiology Unit; and the MRC Centre for Obesity and Related Metabolic Diseases (MRC CORD) in Cambridge became the MRC Metabolic Diseases Unit].
- Two new unit directors appointed: Professor Lawrence Moore (MRC & CSO Social and Public Health Sciences Unit at the University of Glasgow) and Professor Umberto D'Alessandro (MRC Unit in the Gambia); and one new unit director appointment in progress for the Institute of Hearing Research, Nottingham.

Table 4: 2013/14 reviews of large-scale investments

	Total at 31 March 2013	Total at 31 March 2014	Reviewed	Closed
MRC institutes	3	3	0	0
MRC research units (i) and joint units (ii)	25	27	5 (iii)	0
MRC university centres and related partnerships (iv)	29	24	5	4 (v)
Total	57	54	10	4

(i) Includes sixteen university units (including two de novo university units)

(ii) Includes two units with programmes funded by the Chief Scientist Office of the Scottish Government Health Directorates

(iii) Includes the proposals for two new university units

(iv) Partnerships include:
- Charities – Arthritis Research UK, Asthma Research UK, Cancer Research UK, British Heart Foundation and Wellcome Trust
- Other research councils and health departments jointly fund UKCRC Centres, Lifelong Health and Wellbeing Centres and the Farr Institute
- A jointly funded MRC and Department of Health centre

(v) Includes two centres which closed as they developed into university units

The Medical Research Foundation

The MRC continued to work in partnership with the trustees of its independently managed charity, the Medical Research Foundation (MRF). The public make bequests and donations to the MRF to support MRC research. During 2013/14 the MRC provided the foundation's trustees with advice on scientific strategy and research opportunities, and peer review support. The MRF made 48 new awards amounting to over £3.36m for research within the MRC's remit. The MRF also contributed £100k towards the mass participation experiments which were part of the MRC's centenary programme (see page 34).

Measuring impact

Evaluation is a critical component of the MRC's work, in helping to ensure that the research we fund is of the highest quality, measuring progress against our Strategic Plan and in assessing how our research leads to economic, academic and social impact.

Researchfish[2] is the main evaluation tool we use to capture and measure the achievements and impact of MRC research. This is an online system developed by the MRC and the research community that allows researchers to provide feedback on the impact of their research. Researchfish is now used widely across the research community as a way of harmonising the collection of research impact. Outputs and outcomes gathered in this way have been used to communicate the benefits of funding medical research to the public, research community and policy-makers. Progress has also been made to better "embed" evaluation in the routine planning and operation of MRC activities.

In 2013 recipients of almost 5000 MRC awards submitted information via Researchfish, a compliance rate of 97 per cent. These awards covered almost 3,400 researchers. Analysis of the Researchfish 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 and technologies, improvements to clinical policies and practices, and how MRC research encourages inward investment to the UK.

MRC-funded research carried out between 2006 and 2013 contributed to:

- 49,159 scientific papers with more than twice the world citation impact.
- The development of more than 379 clinical guidelines.
- The development of more than 900 products and interventions.
- The creation or growth of 109 companies.
- 667 published or granted patents, with discoveries from 229 (34 per cent) of these patents already licensed worldwide.
- Collaborations with researchers in more than 104 countries.

The MRC publishes a high level analysis of the outputs, outcomes and impacts information collected through Researchfish each year, which is made available on the MRC website[3].

The MRC also plays a pivotal role in developing the mechanisms to better understand the link between medical research and its economic and societal impacts. The MRC has run an economic impact research programme since 2012, with one round of funding per year and has so far funded four projects to help gauge and maximise the links between research and impact. The project funded in the first round investigated how the time between initial research and the eventual health benefits can be speeded up or slowed down[4]. The decision for the latest round of funding will be made in summer 2014[5].

2. Formerly MRC e-Val, developed in 2009. In 2012 the technology was licensed to Researchfish Ltd, which created a federated version of the system to allow it to be used by multiple funders to collect comparable research outputs.
3. Outputs, outcomes and impacts of MRC research 2012 report can be found at http://www.mrc.ac.uk/Achievementsimpact/Researchfish2012/index.htm. The report of the 2013 information will be available in mid-2014.
4. http://www.insight.mrc.ac.uk/2013/12/17/measuring-time-getting-research-from-bench-to-bedside/
5. http://www.mrc.ac.uk/Fundingopportunities/Highlightnotices/MRCEconomicImpact/MRC009122

Research publications

Peer-reviewed journal articles and reviews are an important primary output from research. They are integral to building a collective knowledge base, forming a comprehensive, up-to-date and authoritative archive of information in a given field. They record new findings, describe methodology and/or discuss new insights from existing work, and are an important way of sharing knowledge.

There is a large amount of interest, from across all of the research community, in measuring the impact of particular articles in journal literature, and the extent to which this knowledge is used. Most approaches are based on capturing the way subsequent publications cite this knowledge.

The citation of papers in research publications is comprehensively tracked and is often used as a way to compare research productivity and quality. Citations are normalised for scientific field and year of publication, meaning the measures of citation 'impact' can be used as indicators across the research base.

The Department for Business, Innovation and Skills (BIS) commissions a biennial analysis of UK research based on bibliometric and other data. The most recent of these studies was published by Elsevier in 2013[6].

The report revealed that despite having just 0.9 per cent of the world's population, the UK represented 4.1 per cent of the world's researchers, produced 11.6 per cent of the world's citations, and was responsible for 15.9 per cent of the world's most highly cited research papers (a notable two per cent increase on that reported in the 2011 analysis[7]). The citation impact of UK research has now overtaken the US and ranks first amongst the research intensive comparator countries used in the study. The UK was also shown to be in a central position in the network of global research collaborations. Articles involving international collaboration were shown to be associated with higher field-weighted citation impact than the articles involving just UK authors. The study also indicated that a high and rising proportion of UK journal articles are cited in patents globally, although the UK share of global patents is not high.

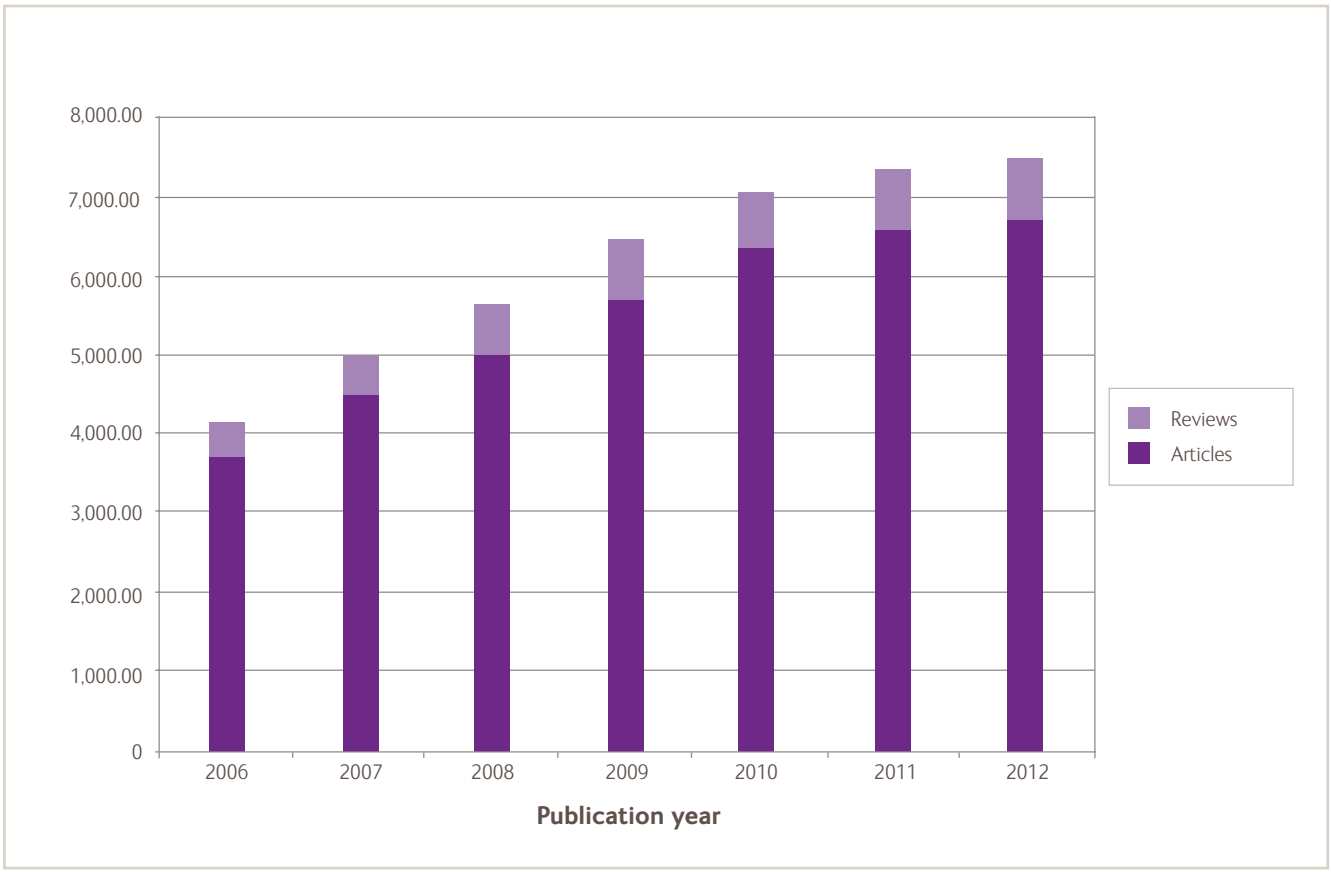
6. International Comparative Performance of the UK Research Base – 2013, report prepared by Elsevier for BIS, can be found at http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/263729/bis-13-1297-international-comparative-performance-of-the-UK-research-base-2013.pdf
7. International Comparative Performance of the UK Research Base – 2011, report prepared by Elsevier for BIS, can be found at http://www.bis.gov.uk/assets/biscore/science/docs/i/11-p123-international-comparative-performance-uk-research-base-2011.pdf

Researchfish[8] collects information about publications that have arisen from MRC-funded research. The last data collection exercise was at the end of 2013.

Table 5: Numbers of MRC research publications reported via Researchfish, calendar years 2006-2012[9]

Year	2006	2007	2008	2009	2010	2011	2012	Total
Review	429	519	665	775	728	793	790	5374
Article	3723	4506	4999	5707	6359	6600	6717	43785
Total	4152	5025	5664	6482	7087	7393	7507	49159

Figure 7: Numbers of MRC research publications, calendar years 2006-2012



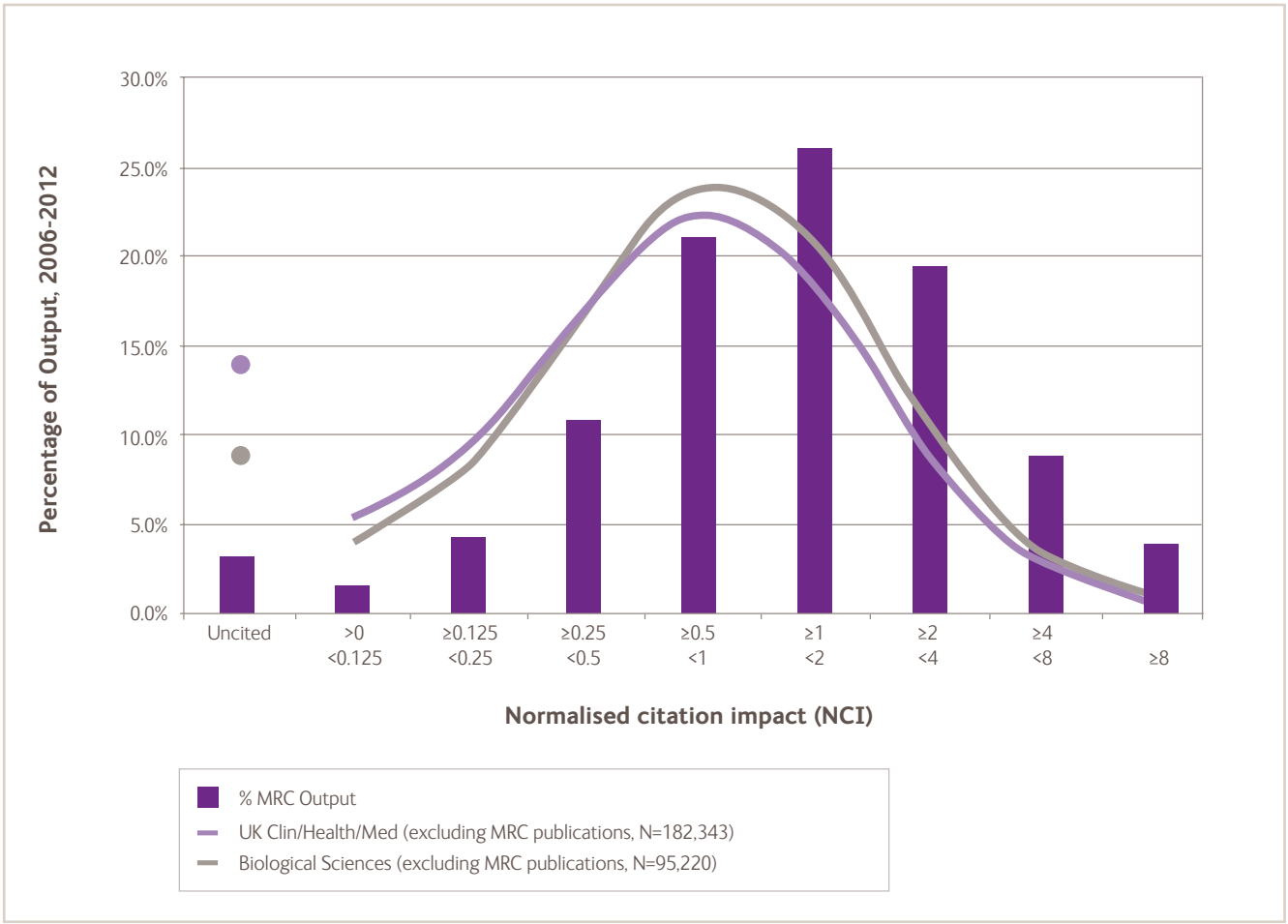
8. The system used by the MRC to collect information on the outputs, outcomes and impacts that have arisen from the research it funds, for further information see http://www.mrc.ac.uk/Achievementsimpact/Researchfish/index.htm
9. It should be noted that owing to the timing of data collection in Researchfish, the figures collected for 2013 are partial and are therefore not included. The data include 'Epubs ahead of print': i.e. publications that are published electronically prior to being 'fully' published in print format.
10. Data and analysis: Thomson Reuters (Evidence)

The MRC sources bibliometric data on each of the publications reported via Researchfish to enable analysis and benchmarking of the productivity of papers that have resulted from MRC funding. Using the publications reported in Researchfish for 2006-2012 and normalised citations taken at the end of 2013, we can show that MRC-attributed publications have an average normalised citation impact of 2.1, which is more than twice the world average. Analysis of these MRC-attributed papers also showed that 46.4 per cent have at least one author from outside the UK.

An impact profile is a graph of the proportion of all articles that have a normalised citation impact within particular ranges. We are interested in the proportion of papers that are highly cited (above four times and 8 times the world average), the modal value for citation impact, and also the proportion of papers that remain uncited.

As shown in figure 7, publications arising from MRC funding performed better than the UK average for fields of biological sciences and clinical/health and medically-related research[10]. For the UK in general, approximately 30 per cent of papers are never cited. This falls to nine to 14 per cent in biomedical fields and for MRC-funded research, this reduces further still to about three to four per cent (as shown in the impact profile in figure 8).

Figure 8: Citation profiles for papers published 2006-2012 with citation scores taken at the end of 2013 – MRC compared with UK research in relevant fields[11].



11. Data and analysis: Thomson Reuters (Evidence)

Caffeine crystals. Coloured scanning electron micrograph (SEM) of anhydrous caffeine crystals (1,3,7-trimethylxanthine). They were produced by a process called sublimation. A liquid containing caffine, such as coffee, is frozen and heated to 238 degrees Celsius, causing the frozen liquid to vaporise without going through the liquid phase. The vapour is then condensed, which drives the water out and results in anhydrous crystals. Some of the crystals have symmetrically intergrown (upper centre, red and yellow). Caffine stimulates the central nervous system (CNS), increasing alertness and deferring fatigue. It occurs in coffee beans and tea leaves. Magnification: x400 at 10 centimetres high.

Report on key activities

Report on key activities

The MRC spends hundreds of millions of pounds directly on research every year. However, we also work in leading policies around research practice, facilitating vital multidisciplinary and cross-sector collaboration, communicating the importance of medical research to a variety of audiences, and establishing the kinds of research environments that allow scientists to flourish. To capture all our activities in the year 2013/14 would be impractical; what follows are a number of highlights that we think best capture our progress in each of the four areas of the MRC strategic plan for 2009-2014, *Research Changes Lives*.

Picking research that delivers

Research Changes Lives sets out our research priorities under two themes: Resilience, repair and replacement, and Living a long and healthy life. We aim to speed up the exploitation of the best ideas in these areas, from fundamental discovery science to therapeutic interventions. In 2013/14, the MRC continued to support world-class scientists working in fields relevant to these themes.

Broad priority areas within these themes include research into the causes and prevention of neurodegenerative diseases; tackling addiction, and the promotion of mental health; regenerative medicine; investigating the genetic basis of disease; ageing research, including the impact of lifestyles and the environment; and studying how the body protects itself from disease.

Regenerative medicine is an emerging multidisciplinary field of research that holds promise for treating a range of conditions by repairing, replacing or regenerating cells. Minister for Universities and Science David Willetts has named regenerative medicine as one of his 'eight great technologies' which support UK science strengths and business capabilities. The MRC is working with a range of partners – including UK bioindustry – to create a national programme of knowledge, technology and skills to keep the UK at the leading edge of the field. The MRC-led *Strategy for UK Regenerative Medicine*, published in 2012, guides work in this area, and 2013/14 has seen many parts of the strategy come to fruition.

The £25m **UK Regenerative Medicine Platform** (UKRMP) was announced in 2012 and is a collaboration between the MRC, the Biotechnology and Biological Sciences Research Council (BBSRC) and the Engineering and Physical Sciences Research Council (EPSRC).

By the end of 2013/14 it had committed its full budget. A total of £20m has been committed to five cross-institutional research hubs, each addressing a key knowledge or technology area needed to support development of new treatments, ranging from smart materials; to techniques for scaling up the production; to the immunological issues around stem cell treatments. £5m of UKRMP funding has also been committed to aligned research programmes in regenerative medicine, which use the hubs to help drive their work towards the clinic. The call, which announced its awardees in February 2014, includes a further £1.2m from Arthritis Research UK.

Also in 2013, we awarded £20m in 12 capital awards providing state-of-the-art facilities and equipment for both the UKRMP hubs and the wider community. These included £5m to establish a national computational and chemical biology facility in Edinburgh studying the stem cell niche, which will be overseen by the UKRMP to ensure it aligns with national aims. In addition, we have worked with the EPSRC to fund a £5m **Centre for Doctoral Training in Regenerative Medicine** at the University of Manchester to provide the next generation of scientists with the skills and expertise to lead the UK's future regenerative medicine ambitions.

An international endeavour

The regulation of cell-based therapies is still at an early stage, but their development and international use will depend on a harmonisation of national policies. In September 2013 the MRC co-organised a workshop aiming to explore areas of potential convergence between North American, European and Japanese regulatory frameworks. By ensuring an international approach, we can help to provide a commercial incentive, and aid the roll-out of therapies for greater patient benefit.

Age-related neurodegenerative diseases are among the leading medical and societal challenges for societies the world over, and are a major priority for the MRC. Of these, the dementias are responsible for the greatest burden of disease, with Alzheimer's disease accounting for around three-quarters of dementia sufferers in the UK.

The **Prime Minister's 'Challenge on Dementia'**, a programme of work aiming to accelerate progress in the prevention, treatment and cure of dementias by 2015, was launched in March 2012. We are on track to meet our target of doubling MRC spend on dementias research from £16.6m in 2010/11 to £33.2m by 2015/16. In December 2013 we pre-announced the £12m **UK Dementias Research Platform**, due for launch in 2014. The platform brings together a number of patient and population cohorts to provide researchers with the power to detect pre-symptomatic and early-stage disease. This will provide new understanding of disease progression, opportunities for the development of treatments for symptoms, and, ultimately, therapies to modify progress of the disease. The platform has been developed with large pharmaceutical companies and small- and medium-sized enterprises. Alongside the platform, the MRC is working with the National Institute of Health Research (NIHR) to co-fund a £650k feasibility study to determine whether people with early-stage neurodegenerative disease would be willing to take part in innovative phenotyping studies.

2013/14 also saw the MRC's continued investment in two major international neurodegeneration collaborations: the **EU Joint Programme in Neurodegenerative Disease Research** (JPND) and the **International Network of Centres of Excellence in Neurodegeneration** (COEN). In 2013 we awarded £3.2m to UK groups involved in six multinational collaborative projects in areas such as developing biological 'markers' of neurodegenerative disease, determining risk factors for disease, and identifying new drug targets.

Systems biology is playing an increasingly important role in medical research. Taking a systems approach – by looking at biological systems as a whole, and studying the scale, timing, and control of interactions between components – can deliver advances in understanding that more reductionist methods cannot. In recognition of this, we worked with the BBSRC to develop a £4m initiative to encourage a **systems approach to immunology**, an area in which there is a huge appetite for such work. In October 2013 the scheme funded two large research consortia, which include industry partners, to investigate immunological phenomena across the lifecourse. One consortium will analyse and model how particular white blood cells called B lymphocytes respond to ageing and to vaccination, and a second will use computational statistical methods to study how the immune system responds to infections, allergies and asthma in childhood and adulthood.

Research into health across the lifecourse makes up an important part of the MRC's strategic plan. The UK's population is ageing – almost a quarter of the population will be over 65 by 2030, and changes to the state pension along with the abolition of the default retirement age mean that a growing proportion of the workforce will be over 60. How will this older population continue to work when they may have chronic conditions? And how can the over 65s – a comparatively sedentary population – be

encouraged to do more exercise? The Lifelong Health and Wellbeing programme, which the MRC manages, worked with a range of partners including researchers, public and private employers and the Department of Work and Pensions to develop its **Extending Working Lives and Promoting Physical Activity in Older Age** schemes. In 2013 £10m was awarded under the schemes to interdisciplinary research consortia aiming to address these questions and inform future policies. The joint funders of the schemes are the BBSRC, the EPSRC, the Economic and Social Research Council and the Scottish and English Health Departments.

An important source of data are population cohorts. These are groups of people, often from a particular geographical area, whose health researchers study – sometimes across their entire lifetime – to learn about health and wellbeing from childhood to older age. The MRC has been funding a diverse range of cohort studies for more than 50 years. In March 2014 we published the ***MRC Strategic Review of the Largest UK Population Cohort Studies*** to provide an overview of the current cohort landscape. It provided the striking figure that one in 30 of the UK population is participating in a cohort study. It documents the variables and data collected by the 34 largest population cohorts – funded by the MRC and others – and models the trajectory for cohorts in the next 10 years. It also makes recommendations about opportunities for cohorts, which will aid the MRC and other funders in making funding and strategic decisions and developing policy.

Also in 2013/14 the five **UK Clinical Research Consortium Public Health Research Centres of Excellence**, and the **Scottish Collaboration for Public Health Research and Policy** (SCPHRP) were renewed. Originally established in 2008 with £20m in funding from eight partners, they transferred to MRC management in 2013 and, along with the SCPHRP, received £16m in funding for their next five-year term. Also in public health research, after consultation with the research community, the MRC Population Health Sciences Group and NIHR, we established a new funding scheme in September 2013 to meet a need for supporting the early-stage development of public health interventions. The rapid-response **Public Health Intervention Development Scheme** (PHIND) awarded £1m to eight projects in areas including smoking cessation and HIV prevention.

Research to people

The second aim of *Research Changes Lives* is bringing research to people. This encompasses the translation of research from laboratory to healthcare settings as well as communication about research, and ensuring that the right regulations, ethics, governance and relationships with decision-makers are in place to ensure the trust of the public and realise the full benefits of research for people and the economy.

Supporting researchers to collaborate with industry is an integral part of our translational research strategy and at the heart of our mission to produce benefits for patients and growth in the UK economy. In 2013/14 we continued to implement innovative ways of working with industry partners to support this goal.

Integral to this is the **TSB/MRC Biomedical Catalyst**, which supports academic and industry scientists to move their research more quickly from discovery to commercialisation. In 2013 the Government announced that TSB funding for the Biomedical Catalyst would be extended beyond its initial three years, boosting the total budget from £180m to £240m. The programme links up the activities of the MRC and TSB to provide a continuous set of support for scientists, from early-stage feasibility testing or establishing proof of concept, to later stage demonstration of clinical effectiveness. The first awards under the scheme were made in August 2012, followed by a further three rounds, with the MRC providing funds to academic researchers and TSB awarding funds to small- and medium sized enterprises. As of 31 March 2014, the scheme had made 226 awards, with £95.7m coming from TSB, £74.5m from the MRC and £95m leveraged in matched finding from industry partners.

In December 2011 as part of the Government's Life Sciences Strategy, we announced the £8m **MRC/AstraZeneca Mechanisms of Disease Initiative**, a landmark partnership with the pharmaceutical company AstraZeneca which won a SCRIP award in 2012 for 'Best Partnership Alliance'. Under this new type of collaboration, we funded UK academic researchers to use deprioritised AstraZeneca compounds to investigate disease mechanisms and explore repurposing the compounds for new disease areas. The MRC has held discussions with over a dozen large biopharmaceutical companies during 2013/14, with the aim of building on this initiative. The intention is to enable UK researchers to undertake experimental medicine studies using assets from the companies. A cross company meeting was held in January 2014, bringing together interested parties, to develop the concept of a "library" of assets which could be made available from multiple companies under a rolling programme.

In March 2014 we also announced a second innovative partnership with AstraZeneca aimed at better understanding the mechanisms of disease. The **AstraZeneca MRC UK Centre for Lead Discovery** will sit within the new AstraZeneca site at the Cambridge Biomedical Campus, due to be completed in 2016. It will see world class MRC-supported researchers working side-by-side with scientists in AstraZeneca's high-throughput screening group, identifying new methods to study a range of diseases, and potential treatment options.

A key area for our aim of getting research to people is antimicrobial resistance. Bacteria and other microbes becoming resistant to our current armoury of antimicrobial drugs is an increasing global threat, with the World Health Organization, the G8 and the UK's Chief Medical Officer all highlighting the need for research to develop strategies to curb resistance, as well as producing new drugs. In 2013, the Department of Health launched a five-year strategy for antimicrobial resistance.

Aligned with this, in December 2013 the MRC established the **Antimicrobial Resistance Funders Forum** comprising the seven research councils, along with health departments, government bodies and charities. Its aim is to bring together the key UK funders and stakeholders to develop a coordinated approach to research addressing antibiotic resistance in humans and animals. The forum has identified four themes for a multidisciplinary research initiative, from understanding the biology of resistant bacteria to studying human behaviour and care. The MRC will contribute towards this initiative, which aims to launch in 2014, in partnership with other funders. Pharmaceutical biotech and diagnostic companies will also be major partners in the initiative.

Working with industry forms an integral part of our **Stratified Medicine Initiative**, launched in 2011. Stratified medicine is an approach which recognises that although patients can share the symptoms of a disease, their response to treatment, and the mechanism by which their disease is caused, may be different. Stratified medicine research aims to identify these subgroups of patients, and ultimately develop therapies that ensure they get the most appropriate treatment.

The initiative takes a disease-specific approach, helping to form and funding research consortia around a particular disease. The consortia are multidisciplinary, involving industry partners, the NHS and academic groups. At their core are cohorts of patients with the disease, who have been extensively studied and provide the valuable insights the researchers need. The initial phase of the initiative funded consortia in hepatitis C, Gaucher's disease and rheumatoid arthritis. They were followed at various points in 2013/14 by consortia in primary biliary cirrhosis, psoriasis and schizophrenia. Altogether the MRC has awarded the six consortia approximately £25m, with Arthritis Research UK contributing £1m towards the rheumatoid arthritis consortium. Together they have a total of 33 industrial partners in both the UK and internationally. A second call, made in October 2013, is expected to fund a £15m second round of the initiative, this time including cancer research.

Experimental medicine is research in people to investigate disease mechanisms or to demonstrate proof of concept of a new discovery or treatment. In 2012/13 the MRC established an ambitious new scheme in this area, the **Experimental Medicine Challenge Grants**, which has an annual budget of £20m for three years. In July 2013 the first round of grants was awarded in areas including placental infection and the rejection of organ transplants. Funded studies are expected to deliver new insights into disease, which can then be translated into new treatments or lead to discoveries that stimulate more fundamental research.

Key to the success of important fields such as stratified and experimental medicine is methodology research, the development of new ways of doing biomedical research. The **Methodology Research Programme**, co-funded by the MRC and the NIHR, supports innovation in research methods in areas from social science to medical bioinformatics and clinical trials. In 2013/14 the MRC, via the Methodology Research Programme, worked with partner organisations NIHR, MHRA, NICE and health departments in the devolved nations to identify the research methods needs of academia, industry and government agencies. This resulted in four highlight notices launched in November 2013 inviting applications for research projects in areas including research methods for assessing quality of life in carers.

The MRC Hubs for Trials Methodology Research

The UK's strengths in clinical trial methodology help to keep the nation a thriving centre for major academic and industrial trials and related investments. Innovative trial design and methodologies are key to maintaining this, and in 2013/14 we renewed the funding for our MRC Hubs for Trials Methodology Research. This nationwide, regionally distributed resource improves the design, conduct, analysis, interpretation and reporting of trials. We renewed funding for six of the eight hubs, as well as putting £1m into a hub network to link their activities and £2.3m to fund PhD training in trial methodology over the next five years.

Part of the MRC's Royal Charter is to promote dialogue with the public about medical research. One part of promoting dialogue is engaging the public in the process and fruits of medical research, and throughout 2013 we delivered a **Centenary programme** of events, initiatives, media and social media work to engage the public, external partners and the MRC community itself in our 100-year research history, as well as looking forward to the continued benefits of medical research in the future. Activities included a poll of the public and people in the public eye asking which past and future medical advances had and might have the most impact; a festival at the Science Museum in London; and Centenary Open Week. In a first for the MRC, we also, with generous support from the Medical Research Foundation, held two 'Medical Research Live' mass public participation events: Worm Watch Lab and 100 Years of Amplified Music. These online experiments allowed members of the public to contribute to medical research by helping with nematode worm and hearing research respectively, by counting the eggs laid by worms for research at the MRC Laboratory of Molecular Biology and completing a hearing questionnaire and hearing assessment for research at the MRC Institute of Hearing Research. Together they have had more than 200,000 page views.

MRC Centenary Open Week

For a week in June 2013 – spanning the 100th anniversary of the first meeting of the then Medical Research Committee and Advisory Council – MRC institutes, units and centres opened up their research to members of the public in engaging and creative ways. More than 20,000 people took part in 50 Open Week activities staffed by 1,400 MRC-funded researchers. Some MRC establishments chose to invite the public to see research in situ, while others took their research to the public at exhibitions, debates, film screenings and comedy nights. Researchers expressed a strong "sense of pride that their research was funded by MRC and a duty to communicate this to the public".

Going global

The third aim of *Research Changes Lives* is to use experience, expertise and resources to encourage partnerships, with and among the international community, to tackle important and challenging research goals. This includes supporting scientists in developing countries to build capacity in global health.

Research is an international activity and the landscape for research cooperation across the world evolves as new global challenges present themselves and emerging economies increase their investment in science and innovation. We aim to represent the UK's interests and **shape science policy** on the international stage to ensure it is fit for purpose, supports research and is compatible with UK legislation. In doing so we can help to spread best practice around the world and learn from other nations, network effectively with partner organisations and ensure that our voice is heard on major issues that relate to our strategy. One way in which we do this is via our Director of International Strategy, Dr Mark Palmer, who in 2013/14 was appointed Chair of the Governing Council of the International Agency for Research in Cancer, Chair of the General Assembly of the European and Developing Countries Clinical Trials Partnership, and Chair of the UK Cross Research Council's international network.

We also enable UK scientists to engage with the best minds, ideas and resources wherever they are located. Biological data underpins much of the work that the MRC supports, and making this data accessible to researchers is vital – on an international scale as much as a national one. 2013 saw the launch of **ELIXIR**, which is establishing and maintaining the European infrastructure for the collection, quality control and archiving of biological data from medical research across Europe. ELIXIR will have a central hub and national nodes, and ensure the longevity of data by capturing, storing, curating, and archiving the data in a manner common to all the nodes and via a common interface. The UK was the first country to sign the ELIXIR Consortium Agreement in October 2013, and hosts the central infrastructure hub on the Wellcome Trust genome campus in Cambridge, paid for by the UK Government. Eight EU member states have signed the Consortium agreement together with the European Molecular Biology Laboratory, EMBL, which provides the legal structure for ELIXIR. A further nine countries are progressing their national legal processes to permit them to sign. The MRC and the BBSRC represent the UK on the ELIXIR Board and with NERC fund the ELIXIR central hub. The MRC and BBSRC fund the UK based, training-focused node.

Health systems in low- and middle-income countries face many challenges, including substantial socioeconomic and health inequalities, and the evolving disease burdens associated with rapid globalisation. To overcome these challenges and deliver health interventions to their populations effectively, such nations need robust evidence on the best way to do so. In October 2013, the £15m **DFID/ESRC/MRC/Wellcome Trust Health Systems Research Initiative** was launched with the first of three annual £5m funding calls. Funded projects will include partnerships with policymakers and other users of evidence such as national Ministries of Health or local delivery partners. This will ensure that the evidence is of direct relevance, accelerating the strengthening of health systems and the translation of research into practice.

Supporting scientists

The fourth and final aim of *Research Changes Lives* is to strengthen the UK research base to enable the scientific community to respond effectively to current and future grand challenges in medical research.

An increasingly important part of this is providing researchers with the capability to carry out large-scale computational data analysis and linkage of biological data such as those produced by high-throughput technologies like genomics, routinely collected socioeconomic data, and those held within the electronic health records of NHS patients. These types of data can now be used on a scale not previously possible in a range of areas, from providing insights into disease mechanisms and causes to monitoring drug safety and improving healthcare. The MRC committed £70m to medical bioinformatics and health informatics in 2013/14 to ensure that the UK takes the opportunity to become a world leader and uses our wealth of data to best effect.

The four Health Informatics Research Centres of Excellence and their associated network were formally opened in May 2013. Announced in 2012 with £19m from an MRC-coordinated consortium of 10 research funders, the centres together received a further £20m from the MRC in 2013 to create the **Farr Institute of Health Informatics Research**, a distributed national research institute. The Farr will create the digital and physical infrastructure required to share data and communicate across the centres, as well as develop standards for data sharing and research.

A further £50m was committed to **medical bioinformatics research** in 2013 to build on our existing large and diverse portfolio in this area. Six strategic projects were awarded in December 2013, totalling £39m. The six major strategic awards will strengthen collaborative links, improve tools and infrastructure for researchers and will support the safe use of biological and patient data for medical research across all diseases. The awards will also support career opportunities for computational scientists and technologists, enhancing the UK's skills in this area. All the awards align with existing large-scale data projects such as the European Bioinformatics Institute, ELIXIR (see page 35), and the Farr Institute (see page 36).

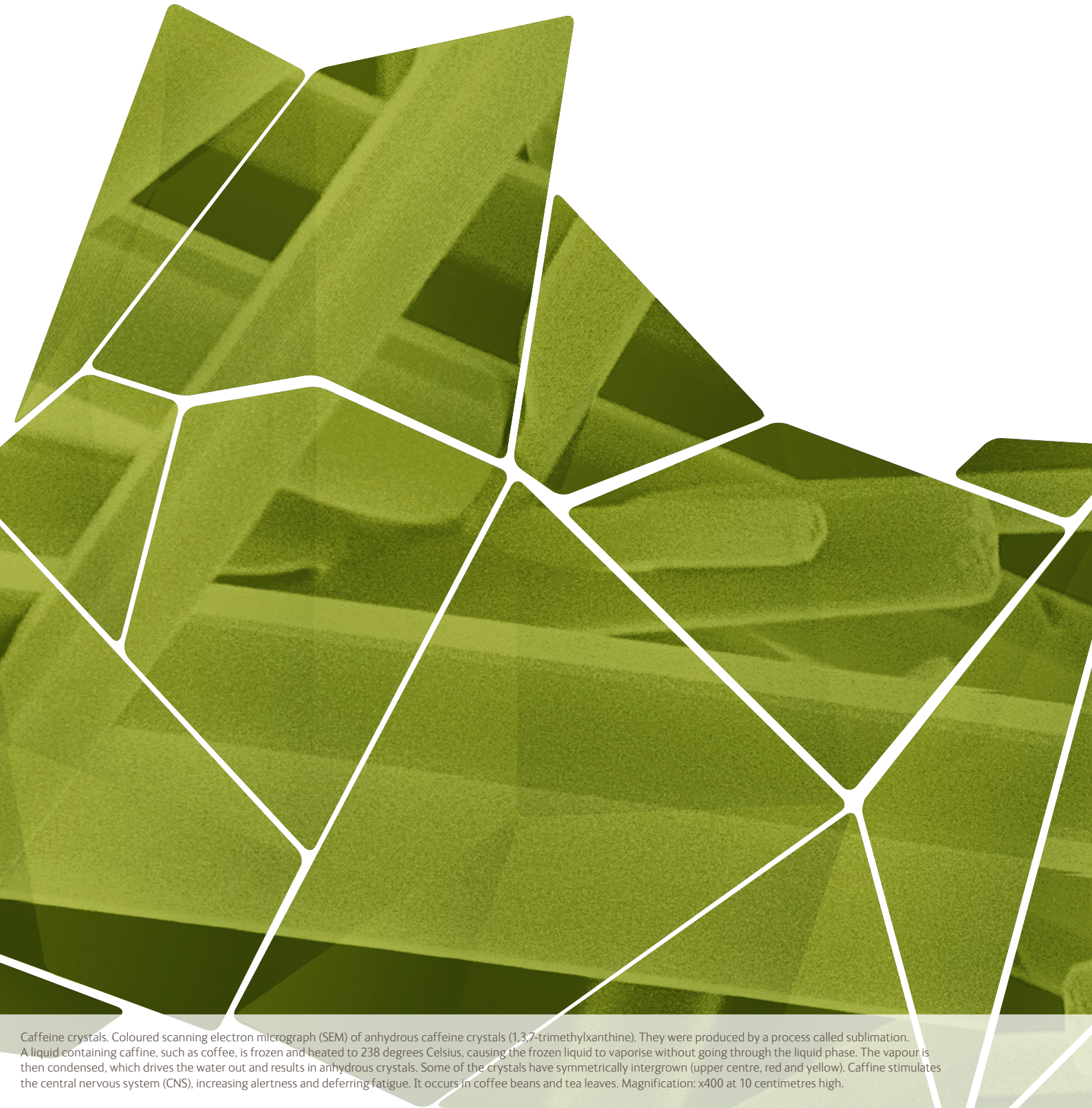
An important part of the MRC's strategy is to harness the huge potential offered by new, **high-throughput or 'omic' technologies** to better understand disease and target treatments. These technologies, such as genomics, proteomics and metabolomics have the power to produce vast amounts of data from biological samples to reveal the biological causes of disease and how they are affected by the social and physical environment. We aim to use them to enhance our existing set of high-value resources such as cohorts, and collections of human tissue and animal models. In August 2013 the MRC made six awards, totalling £6.5m, for omics projects using: the cohorts of the MRC Clinical Trials Service Unit and the MRC Epidemiology Unit at the University of Cambridge; the MRC Brain Banks Network; and the MRC investment in the International Mouse Phenotyping Consortium. The new data generated will be added to existing datasets and made available to researchers.

To carry out world-class medical research, UK scientists need the best available equipment, and ensuring that researchers have state-of-the-art technologies at their disposal is a crucial part of the MRC's strategy. The MRC made a £4.8m investment in a 300KeV Titan Krios Cryo-EM microscope for the MRC Laboratory of Molecular Biology which has been up and running since shortly after the new LMB building opened in May 2013. The LMB will allocate more than 20 per cent of access to the microscope over to the community, widening the pool of UK scientists able to use this important equipment. Building on the success of this, with lead funder the Wellcome Trust (£7.8m), the MRC (£4.8m) and BBSRC (£3m) awarded £15.6m in August 2013 to provide a **new national electron microscopy facility**. Housed at the Diamond Light Source site in Oxfordshire, the facility will include two further Titan machines, allowing researchers to capture images of the three-dimensional structures of biological assemblies within cells, as well as of cell and tissue sections, playing to the UK's strengths in both structural and cell biology.

Technology is also at the heart of the MRC's **Enhancing the UK's Clinical Research Capabilities and Technologies** initiative. Launched in November 2013, the initiative is making more than £150m available for investment in new technologies to address major scientific challenges relating to the stratification of diseases or experimental studies in humans. The scheme is the result of a £150m capital investment, and we are working with partners including the Department of Health, the devolved health administrations, research councils, the Wellcome Trust, Cancer Research UK and the British Heart Foundation to build on this, creating clinical research infrastructure on a scale that would be impossible for any one funder alone. Funds have been made available in three areas: innovative technologies for stratified and experimental medicine, dementias research and single-cell functional genomics. Investments will be aligned with academic research strengths and institutional clinical structures. As well as capital, funds are available to fully exploit technologies, piloting new uses and exploring new areas in clinical research. Facilities will be available as part of the national science base – making clinical research central to UK life sciences.

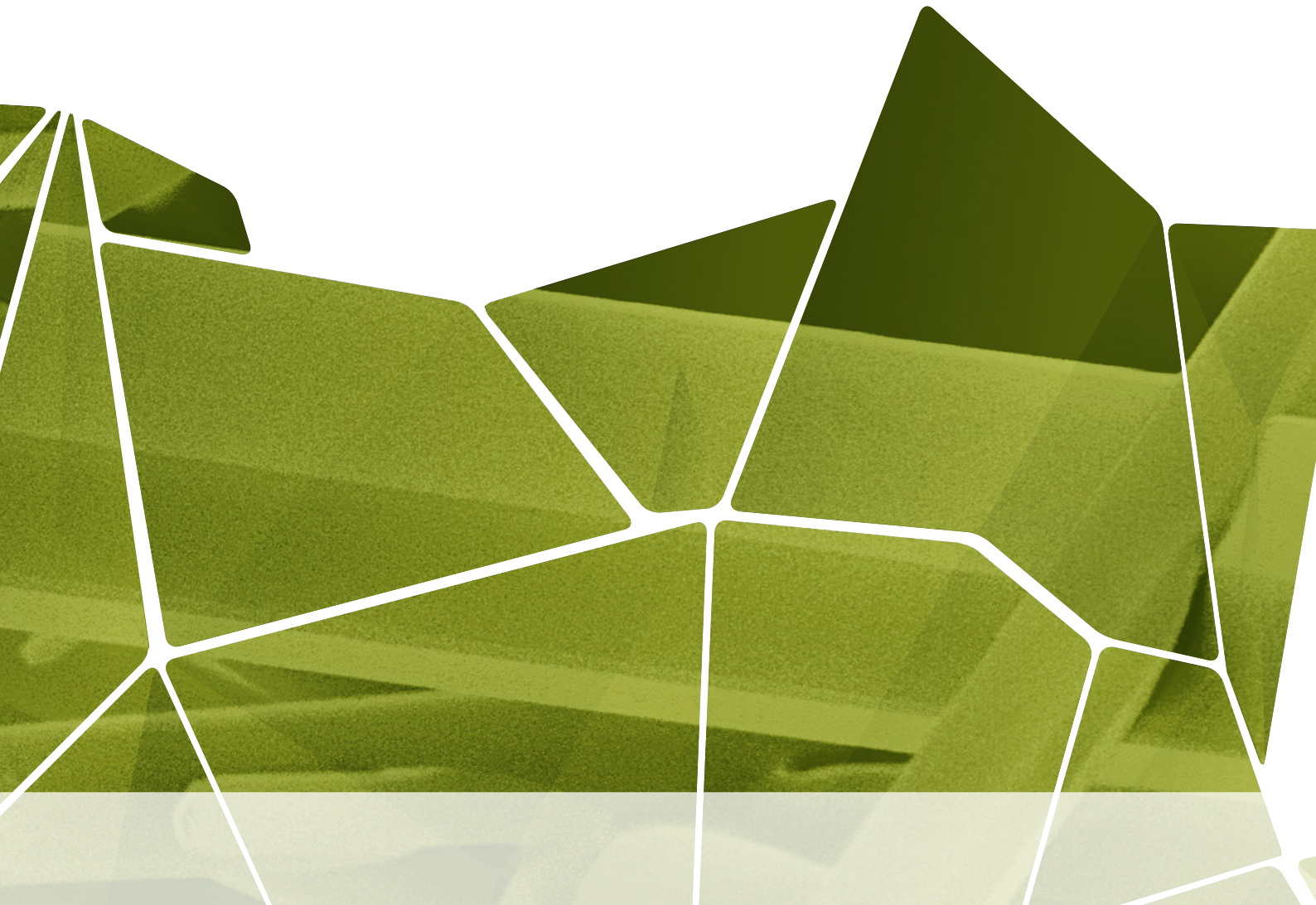
Progress with the building of the **Francis Crick Institute** has continued apace during 2013/14. The Crick is a major commitment for the MRC and is central to our aim to provide world-class facilities and training environments for our scientists, as well as maintaining the UK's excellent international position in research. Construction work remains on time and within budget, and plans are in place to move much of the research work from the existing National Institute of Medical Research in Mill Hill to the new institute. The building was 'topped out' in June 2013 on the same day that the institute launched its strategy, stating its aim to bring together outstanding scientists from all disciplines to carry out discovery biomedical research to help better understand why diseases develop and to find new ways to diagnose, prevent and treat a range of illnesses such as cancer, heart disease and stroke, infections and neurodegenerative diseases.

Brain banks are an invaluable source of human brain tissue, the analysis of which has made a huge contribution to progress in the neurosciences. The MRC spends more than £1.5m per year supporting the people and facilities that enable brain donation for research, in addition to funding the research that uses this tissue. We lead the **UK Brain Banks Network**, a UK Clinical Research Collaboration of MRC or charity-funded brain banks which provides researchers with brain tissue and establishes standards in brain banking. The charity partners include Alzheimer's Research UK, Alzheimer's Society, Parkinson's UK, MS Society and Autistica. Brain tissue banks store post-mortem brain tissue for diagnosis and research, and the network is working to find ways to speed up the collection of tissue, and to increase the collection of tissue that is the most useful for research, including brain tissue from patients at an early stage of disease, from people in well-characterised clinical cohorts, and from healthy people as comparators. In July 2013 we made a £4.8m award to four brain banks in Edinburgh, London, Newcastle and Oxford to support research into the causes and potential treatment of a range of diseases affecting the brain.



Caffeine crystals. Coloured scanning electron micrograph (SEM) of anhydrous caffeine crystals (1,3,7-trimethylxanthine). They were produced by a process called sublimation. A liquid containing caffine, such as coffee, is frozen and heated to 238 degrees Celsius, causing the frozen liquid to vaporise without going through the liquid phase. The vapour is then condensed, which drives the water out and results in anhydrous crystals. Some of the crystals have symmetrically intergrown (upper centre, red and yellow). Caffine stimulates the central nervous system (CNS), increasing alertness and deferring fatigue. It occurs in coffee beans and tea leaves. Magnification: x400 at 10 centimetres high.

Management commentary



Management commentary

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.

MRC people

Following five years of pay freeze and then restraint (one per cent pay increases in this year) the MRC Remuneration Committee commissioned an independent report into the impact that the austerity measures were having on scientific productivity. The report found that the biggest single issue was being felt in recruitment, where first choice candidates were turning down roles with the MRC, often quoting higher salary offers from medical charities and universities. Retention was not presenting as a major issue (scientists prefer to remain settled in an established lab to improve their productivity) but was showing signs of being an issue as larger numbers reported looking for new roles outside the MRC.

The biggest changes in the year were to the organisation structure, with the Transfer of Undertakings (Protection of Employment) Regulations (TUPE) transfer of staff to universities in Dundee, Glasgow, Cambridge, Oxford, London and Southampton. The National Trade Union Side provided excellent representation for its members throughout the transfers and played a key part in helping shape the TUPE arrangements for the transfer of National Institute for Medical Research (NIMR) to the Crick, which is still scheduled for April 2015.

In July 2013 we launched our Equality Vision. This illustrates how we are working to provide an inclusive culture where individual differences and diversity are welcomed in our workforce, in applications for jobs and funding, and in the MRC Council and its advisory bodies. **http://www.mrc.ac.uk/Utilities/Documentrecord/index.htm?d=MRC009355**

During 2013 we have made significant investments in developing the next generation of leaders and managers in medical research. Selected candidates undertook programmes specifically tailored to the challenges and opportunities faced by scientific leaders, including maintaining and increasing a significant, competitive international profile, developing their teams and the careers of those who work with and for them, and building strategic capability.

Table 6 shows data for 2013/14 (locally employed staff in The Gambia and Uganda are not included).

Table 6: MRC employee analysis (for UK paid employees in post as at 31/03/14)

Gender	No. of employees	Percentage
Female	1309	51.13%
Male	1251	48.87%
Total	2560	

Ethnic group	No. of employees	Percentage
BME	317	12.38%
Non BME	1872	73.13%
Not disclosed	338	13.20%
Other ethnic group	33	1.29%
Total	2560	

Disability	No. of employees	Percentage
Yes	26	1.02%
No	1,472	57.50%
Not disclosed	1,062	41.48%
Total	2,560	

Table 7: Sickness absence 2013/14

Sickness absence	2013-14
Total no. of employees (as at 31/03/14)	3,219
Total days lost to sickness	13,460
Avg. working days lost	4.18

Efficiency

As set out as part of the 2010 spending review settlement, the research councils have begun implementation of an efficiency programme to drive down the costs and overheads associated with research. The efficiency savings derived from this programme are being re-invested in research.

In the spring of 2011 RCUK published *Efficiency 2011-15: Ensuring Excellence with Impact* describing how the research councils would implement the recommendations in Sir William Wakeham's report *Financial Sustainability and Efficiency in Full Economic Costing of Research in UK Higher Education Institution*. The efficiency savings are being applied to both research grants and fellowships awarded via competitive routes to research organisations and also to research council institutes. The combined savings for the first two years of the programme (2011/12 and 2012/13) have exceeded the planned £30.5 million and £82.2 million targets with details provided in the programme's annual report at **http://www.rcuk.ac.uk/RCUK-prod/assets/documents/documents/RCUK_Efficiency_Savings_Report_2012-13.pdf**

The combined savings for the third year (2013/14) are planned to be £138.5m rising over the four year spending review period to reach a total of £428m over the full period.

Alongside these measures the research councils also introduced changes to the requests for equipment on grants, including asking applicants to demonstrate how the usage of the equipment will be maximised. RCUK is currently working with university partners to develop options to promote and assist equipment sharing, including exploring the issues around asset registers. There is good anecdotal evidence of significant progress by universities to promote sharing, and of very efficient usage of large pieces of experimental equipment.

Safety, security and resilience

In line with the Government's policy on health and safety performance, we continue to strive for the MRC to be an exemplar of best practice. Our strategy is to minimise interruption to the MRC's research programmes by maximising operational effectiveness.

A pilot study was undertaken at the MRC Unit, The Gambia, to develop and implement blended learning (a mixture of online and offline teaching methods) for fieldworkers gathering raw data and biological samples from the local population.

This project showed that blended learning could be used to achieve:

- Better learning outcomes (engagement, achievement, learning performance, fieldwork performance and behavioural change)
- Better organisational performance (increased safety awareness, increased data quality, increased worker IT confidence, increased operational resilience)
- Reduce the cost (70 per cent of the financial cost and 60 per cent of the time cost) of previous training process and methodology

These benefits were achieved through a planned learning intervention tailoring pedagogy to a specific cohort of workers, and using the intervention to re-engineer the learning process and achieve performance change.

MRC staff travel extensively around the world to pursue scientific research in challenging situations as well as attending international conferences. A full review of the MRC's travel safety policy and guidance was undertaken and

- Updated guidance was issued
- Travel insurance cover renegotiated to more favourable terms
- Travel clinic arrangements put in place for head office
- A programme of personal travel safety courses established
- A travel alert system introduced to warn staff of potential problems whilst travelling or at their destinations.

The safety, security and resilience (SSR) team saw success in the Continuity Insurance and Resilience Awards in conjunction with the MRC Laboratories in The Gambia. Two awards were received, for the unit's recovery from the flooding at the Basse field station and the SSR team's e-learning course on research continuity.

An audit of pre-employment screening of temporary staff found that agencies used were not screening staff to agreed levels. Immediate action was taken and some agencies were struck from the supplier list. The majority of the agencies were on the Government Framework. The Cabinet Office have taken up these agencies shortcomings with the Government Procurement Group.

In conjunction with the University Safety and Health Association a conference on laboratory design was held at the Royal Institute of British Architects. The conference was attended by a wide range of internationally recognised architects, designers, engineers and scientists.

A new incident recording system was introduced in 2013. The new system is much easier to use than the previous system and so encourages greater reporting. The MRC's research units and institutes remain competitively benchmarked in health and safety, personnel security and business continuity planning. During the calendar year to 31 December 2013, there were 160 accidents reported across the MRC (2,848 staff) compared with 129 for 2012 (3,073 staff). The new system and associated training may have contributed to the rise in numbers reported.

The number of accidents resulting in more than three lost work days remained the same as 2012 at five giving a rate of 1.75 such accidents per 1,000 staff.

Social and community issues

In its strategic plan *Research Changes Lives*, the MRC pledges to make its work accessible to the public and to demonstrate value and highlight achievements. Engagement with the public and communities is delivered directly by MRC-funded researchers, who interact with a wide range of audiences including patient groups, local communities and schools. The most recent Researchfish data show that, since 2006, there have been more than 18,394 individual engagement events by MRC researchers, of which 2,442* were reported in the most recent round of data-gathering.

Engagement with patient groups and research participants is common among scientists working in a recognisable disease area and 12 per cent of the engagement activities reported in Researchfish relate to these audiences. These interactions help reassure patients, and their families and carers that scientists are endeavouring to make a difference to patients, and also remind researchers how important their work is to people affected by a particular condition.

* Researchfish data for 2013 is a partial representation of what happened during the year due to the timing of the data collection, which took place in October and November 2013.

Case studies:

"Do you have the symptoms of chickenpox?"

Dr Donald Davidson from the MRC Centre for Inflammation Research at the University of Edinburgh helped develop Micromania, an educational children's game about infectious diseases, based on Happy Families. Players collect card 'families' such as Pathogen, Route of Infection and Symptoms from the other players, each detailing different diseases such as chickenpox, flu and TB. The game is now promoted by the British Society for Immunology. Dr Donaldson is active in public engagement and has recently judged the national MRC-sponsored Debating Matters competition; delivered a 'meet the bacteria' activity in a local primary school; and hosted three secondary school pupils on work experience programmes.

MRC Mini Scientists

At the 2013 Edinburgh International Science Festival, more than 1,000 children visited the MRC Mini Scientists activity where they were introduced to the concept of using animals in medical research with two tanks of zebrafish sourced from an MRC lab. Almost 50 MRC-funded researchers, staff and PhD students from MRC units and centres across Scotland talked to the children about how fish are used in cancer research to learn more about human growth and development. It took only a few moments of gazing into the tanks for the children to start listing similarities between the fish and themselves. The general responses from the children to the use of fish in research have been written up on the MRC's blog, Insight (see **www.insight.mrc.ac.uk**).

MRC Centenary Open Week

As part of a nationwide programme of open days and events to mark the 100th anniversary of the founding of the Medical Research Council (see page 34), the MRC Centre for Drug Safety Science organised a series of public exhibitions, talks and films at the historic Victoria Gallery and Museum in Liverpool. Researchers from the centre demonstrated to local visitors the global impact of medical research in areas such as ageing, arthritis, drug safety and 'personalised' medicine, and explained the contribution of research to society and how it helps improve the health of people not only in Merseyside but also in the UK and across the world. Researchers who took part were very positive about the event: "The high volume of questions at the end of the event demonstrated that people had understood the scientific content and, crucially, what the MRC does with taxpayer's money."

Estates management

A new facility opened at the MRC Clinical Sciences Centre in October 2013 to provide additional research space for recruitment of new teams.

A failing laboratory in the Gambia was refurbished and re-opened on a tight schedule.

A new clinical research facility was established in Uganda following the purchase of property.

The MRC Social and Public Health Sciences Unit was relocated to improved accommodation in Glasgow.

A project to relocate the Prion Unit has been initiated, working in collaboration with UCL.

Sustainability report

This is the third year that the MRC has produced a sustainability report across all MRC units, institutes and our two head office sites.

The MRC head office estates management section (EMS) has continued to work with colleagues across all MRC sites to improve the monitoring and collection of environmental data and, while it is recognised that room for improved measurement still remains, considerable progress has been made in improving the quality of the data available. Some significant savings have been achieved by adopting innovative solutions at some of our units.

MRC policy and summary of performance

The MRC is committed to the continual improvement of our environmental performance. Details of the MRC's environmental and sustainability policies, governance processes that support that management of sustainability performance, and the organisation's objectives can be found on the MRC website **(www.mrc.ac.uk)**.

Each MRC research unit and institute is required to have a local environmental policy and action plan. They regularly monitor performance at a local level to ensure continuous improvement, wherever possible measuring their performance against measured data, and update their policies and objectives as necessary. EMS encourages and assists in the implementation of good environmental and sustainable practices in MRC estates and facilities and in MRC projects. EMS also shares good practice and maintains guidance to reflect the latest Government and regulatory requirements.

The MRC's environmental and sustainability policy and its attendant procedures will be subject to internal audit every three years to provide assurance that its requirements are being implemented effectively.

Key examples of steps taken by the MRC to improve our environmental performance include:

- The new building for the MRC Laboratory of Molecular Biology was 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
- 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 Government Property Unit (GPU) annual benchmarking exercises for office buildings since it started
- The MRC is participating in new government initiatives such as the "Carbon Reduction Commitment" and "Greening Government"

Environmental data

The reporting boundaries encompass the MRC's operational activities within all research units and institutes, including those in The Gambia and Uganda, as well as the Head Office sites. The figures include a proportion of UK Shared Business Services Ltd emissions for their occupation of North Star House, Swindon as agreed with other Research Councils.

Table 8: Annual consumption and resultant emissions for energy and water

Category	Unit	2011/12	2012/13	2013/14
Direct energy emissions				
Natural gas – usage (1)	kWhr	34,206,945	33,196,584	44,301,195
Natural gas – expenditure (2)	£	1,214,582	1,318,000	1,212,559
Natural gas – emissions	tCO2e	6,280	6,094	8,133
Indirect energy emissions				
Grid mains electricity – usage (3)	kWhr	56,399,518	68,265,501	59,814,206
Grid mains electricity – spend (4)	£	4,641,795	5,049,000	4,980,694
Grid mains electric – emissions	tCO2e	30,512	36,930	32,359
Other indirect emissions				
Business travel – emissions	tCO2e	1,681	1,455	1,423
Business travel – spend	£	1,704,548	1,610,000	1,298,672
Out-sourced emissions	tCO2e	268	268	268
Emissions totals	tCO2e	38741	44,747	42,183
Emission totals/FTE	tCO2e/FTE	8.6	9.9	9.4
Finite Resource Consumption				
Mains water consumption (5)	Cubic M	265,731	344,484	345,542
Mains water consumption/FTE	Cub. M/FTE	59.1	76.5	76.7
Mains water expenditure (6)	£	415,736	448,000	368,444
Waste				
Waste sent to landfill	Tonnes	Unavailable	Unavailable	622
Recycled/Reused waste	Tonnes	Unavailable	Unavailable	474

KWhr = Kilowatt hours. tCO2e = Tons of carbon dioxide emitted. FTE – Full time equivalent. (1) Gas usage from sites where data was available. (2) Total gas expenditure (includes payment via service costs). (3) Electricity usage from sites were data was available. (4) Total electricity expenditure (includes payment via service costs) (5) Water consumption data from sites where it was available. (6) Total expenditure, including sites where water consumption measurement data was not available (e.g. where paid via service costs)

Owing to incomplete data, it is currently not possible to analyse trends in emissions across the whole of the MRC.

The overwhelming bulk of the carbon emissions recorded results from the power demands of scientific equipment, or where the conditions in which the research carried out requires high levels of containment, or air changes, which add considerably to power consumption. Some buildings such as vivariums require large amounts of water in the course of operation and also generate a large amount of waste, for example bedding. The MRC continues to investigate the practical possibilities of reducing power demands by more sophisticated use of building management systems and has begun to introduce revised practices. In the course of doing so, the MRC is gaining a better understanding of where such reductions can be carried out without damaging research effectiveness or creating potential health risks.

Quality and completeness of MRC data

Electricity and gas

Some MRC research premises are embedded in host institution sites and do not have separate metering. Often these sites do not pay for utilities directly to the supplier but instead the host institution enters into the supply contracts, pays the suppliers and then recharges the cost to the MRC units via pro rata calculations (based on floor space) through the building service charges. The MRC has already carried out extensive metering of buildings on MRC-run sites where we buy electricity and gas directly from the suppliers and the number of sites from which meaningful data is unavailable has been reduced.

Business travel

Carbon emissions from all forms of travel (road, rail and air travel) have been collated from staff records and the resultant journey distances have been converted to calculate associated carbon emissions via the conversion factors published by the Carbon Trust[12].

Waste

The MRC has worked on improving the quality of its data on all elements of waste measurement and whilst it is recognised that there is still room for improvement, it is now able to provide some meaningful data on this.

Finite resource consumption

The MRC has improved the quality of data with regard to water consumption. More reliable figures for water are included in this report.

12. http://www.carbontrust.com/

Biodiversity action planning

The MRC undertakes biodiversity action planning at the two sites where the MRC has extensive grounds – at MRC Harwell in Oxfordshire and at NIMR at Mill Hill, north London. At both sites the local environmental policy encourages the improvement of conditions in which biodiversity can thrive by careful estates management of grounds.

Sustainable procurement

The MRC is collaborating with other research councils and the UK SBS Ltd in a procurement strategy based on regional clustering and bundling of facilities management contracts. The main focus of initiatives has been to reduce utilities and costs wherever possible and to promote the reduction of unnecessary consumption.

Future strategy

It is a priority for the MRC to improve the quality and consistency of data available to be able to encourage efficient behaviours.

As part of this improvement, we will work with landlords where the MRC pays for utilities via service contracts. We will also work with MRC units to continue the installation of improved metering.

Key environmental commitments for the next year include:

Building, facilities and estates

- We will reduce our environmental footprint by using environmental best practice to design, construct and maintain our buildings and other equipment
- We will measure and reduce emissions of carbon dioxide and other deleterious gases into the atmosphere
- We will take steps to update and improve the means of measuring emissions waste and other criteria arising from our activities
- On those sites where units and institutes have grounds which we manage, we will seek to protect and enhance biodiversity
- We will work to maximise the recycling of waste materials

Travel

We will continue to encourage employees to use tele-/video-conferencing where possible and public transport when travel is necessary.

We will promote the establishment of green travel plans by units and institutes wherever possible.

Financial results

Each year we receive a budgetary allocation from BIS in the form of a Departmental Expenditure Limit (DEL). The DEL is the primary control mechanism set by HM Treasury in resource accounting and budgeting, limits are set in the Spending Review. The MRC may not exceed the limits that they have been set. There is no flexibility allowed in practice to carry forward previous years' underspends.

The MRC has separate budgets for:

- Resource – which includes Near-Cash current expenditure such as pay or procurement and Non-Cash including depreciation, which is the current cost associated with the ownership of assets.
- Capital for new investment and renewal.

Within the resource budget some transactions will have an immediate or near-immediate impact on the fiscal position, for example pay, procurement and depreciation. Other transactions will only have an effect in future periods, for example the take-up of provisions, or revaluation of assets. Both types of transaction fall within the resource budget. Administration budgets are controlled to ensure that as much money as practicable is available for science programmes. Provision in the resource budget that is not in administration budgets is termed programme spending.

A summary of the MRC's financial results for 2013/14 and the preceding two years is shown in the tables starting on page 51. Table 9 shows results using the accounting conventions required for reporting to central government. This form of accounting differs in a number of ways from that required for our formal audited accounts. A reconciliation between the two sets of accounts is shown at Table 10.

Major Projects

The Francis Crick Institute

The Francis Crick Institute is a joint venture between MRC, Cancer Research UK, the Wellcome Trust, University College London (UCL), Kings College London and Imperial College of Science Technology and Medicine, and is set up as a charitable organisation limited by shares. Each of the partners has agreed to capital contributions leading to shares, the capital being used for the construction of a new facility at St. Pancras, London. The new partners will also contribute to operational costs based on a new scientific strategy, and building lifecycle works i.e. capital replacement of assets, which are integral to the building such as mechanical, electrical, digital and fabric assets. The overall construction cost is £541m, with the MRC's contribution being £253m. Total cost of land for the site was £85m, of which the MRC contributed £47m.

A project assurance Gateway '0' Review was conducted in October 2013 by the Office of Government Commerce when an amber-green level of delivery confidence was provided. The main contract was awarded for the construction work in February 2013, which continues on time and within budget. Plans are in place for the move to the new institute from the existing National Institute of Medical Research in Mill Hill, and the disposal of associated properties.

The value of MRC's investment in the Francis Crick Institute (including land and investments) amounts to £279.3m as at 31 March 2014 (£164.9m at 31 March 2013).

UK Shared Business Services Limited (SBS)

The SBS provides a number of services to BIS and their partner organisations including the MRC. The SBS draws together a wide range of services – from HR and finance through to, IT procurement and grants – onto a single integrated platform. The SBS was set up with the aim of reducing spending through sharing and standardising processes, including more efficient procurement. The MRC utilises the single platform for its research grants, human resources, finance and procurement operations. Majority ownership and control is assumed by BIS, although the MRC retains a nominal interest in its ownership. Rather than transact directly with UKSBS, BIS has implemented a recharging solution whereby its partner organisations' grant levels are reduced, and the department pays UK SBS on its behalf. Although the accounting transaction occurs between the department and UK SBS ltd, partner organisations still need to reflect the substance of the transaction, i.e. that services are received from UK SBS ltd. (Full details of the charge are included at Note 1p in the Financial Statements.) The SBS is regarded as a business critical project and is referred to in our Governance Statement.

Review of the year

The MRC is required to control budgets within DEL under the Resource Accounting and Budgeting regime. The Programme Resource Near-Cash outturn of £559.7m was £0.2m (0.03 per cent) lower than budget. Capital expenditure at £71.5m was £0.5m lower (0.7%) than budget. Administration expenditure was £5.3m less than budget of £29.9m. These results were within the parameters expected by the organisation. The figures shown in the financial summary at Table 9 (overleaf) are those after adjusting for the difference between statutory presentation and those scoring under DEL. Table 10 shows the reconciliation of the finance tables to the Annual Accounts.

Table 9: Summary of Financial Return for 2013/14

	2013/14							
	Programme Resource			Admin Resource			Capital	Total
	Near Cash £000	Non Cash £000	Total £000	Near Cash £000	Non Cash £000	Total £000	£000	£000
External Income	(84,019)	0	(84,019)	(95)	0	(95)	(2,967)	(87,081)
Income from Commercial Activities	(85,416)	0	(85,416)	0	0	0	0	(85,416)
Total Income	**(169,435)**	**0**	**(169,435)**	**(95)**	**0**	**(95)**	**(2,967)**	**(172,497)**
Pay and Operating Costs (1)	280,550	1,655	282,205	24,678	0	24,678	0	306,883
Depreciation of property, plant and equipment	0	21,993	21,993	0	0	0	0	21,993
Amortisation of Intangible assets	0	24,844	24,844	0	0	0	0	24,844
Impairment of property, plant and equipment	0	7,768	7,768	0	0	0	0	7,768
Reversal of prior year impairment of property, plant and equipment	0	(14,338)	(14,338)	0	0	0	0	(14,338)
Share of losses of joint venture	0	0	0	0	0	0	0	0
Provision movement	803	0	803	0	0	0	0	803
Research grants	429,887	0	429,887	0	0	0	76,760	506,647
International Subscriptions	17,678	0	17,678	0	0	0	0	17,678
Loss on Disposal of Property, plant and equipment	247	0	247	0	0	0	0	247
Direct Capital	0	0	0	0	0	0	109,725	109,725
Total Expenditure	**729,165**	**41,922**	**771,087**	**24,678**	**0**	**24,678**	**186,485**	**982,250**
Net Income & Expenditure	**559,730**	**41,922**	**601,652**	**24,583**	**0**	**24,583**	**183,518**	**809,753**
Less Income from Dept of Health (2)	**0**	**0**	**0**	**0**	**0**	**0**	**(112,000)**	**(112,000)**
Adjusted Net Income & Expenditure	**559,730**	**41,922**	**601,652**	**24,583**	**0**	**24,583**	**71,518**	**697,753**
DEL Budget	(559,894)	(51,751)	(611,645)	(29,944)	0	(29,944)	(72,000)	(713,589)
(Underspend)/overspend	(164)	(9,829)	(9,993)	(5,361)	0	(5,361)	(482)	(15,836)

(1) Non cash relates to Exchange rate losses (see note 10)
(2) Capital contribution re The Francis Crick Institute

Table 9: Summary of Financial Return for 2012/13

	2012/13							
	Programme Resource			Admin Resource			Capital	Total
	Near Cash £000	Non Cash £000	Total £000	Near Cash £000	Non Cash £000	Total £000	£000	£000
External Income	(102,424)	0	(102,424)	(162)	0	(162)	(2,172)	(104,758)
Income from Commercial Activities	(91,720)	0	(91,720)	0	0	0	0	(91,720)
Total Income	**(194,144)**	**0**	**(194,144)**	**(162)**	**0**	**(162)**	**(2,172)**	**(196,478)**
Pay and Operating Costs	316,924	0	316,924	35,023	0	35,023	0	351,947
Depreciation of property, plant and equipment	0	21,235	21,235	0	0	0	0	21,235
Amortisation of Intangible assets	0	19,860	19,860	0	0	0	0	19,860
Impairment of property, plant and equipment	0	3,934	3,934	0	0	0	0	3,934
Reversal of prior year impairment of property, plant and equipment	0	0	0	0	0	0	0	0
Share of losses of joint venture	0	0	0	0	2,394	2,394	0	2,394
Provision movement	(1,618)	0	(1,618)	0	0	0	0	(1,618)
Research grants	403,025	0	403,025	0	0	0	11,060	414,085
International Subscriptions	17,847	0	17,847	0	0	0	0	17,847
Loss on Disposal of property plant and equipment	912	0	912	0	0	0	0	912
Direct Capital	0	0	0	0	0	0	69,442	69,442
Total Expenditure	**737,090**	**45,029**	**782,119**	**35,023**	**2,394**	**37,417**	**80,502**	**900,038**
Net Income & Expenditure	**542,946**	**45,029**	**587,975**	**34,861**	**2,394**	**37,255**	**78,330**	**703,560**
Less Income from Dept of Health*	**0**	**0**	**0**	**0**	**0**	**0**	**(58,000)**	**(58,000)**
Adjusted Net Income & Expenditure	**542,946**	**45,029**	**587,975**	**34,861**	**2,394**	**37,255**	**20,330**	**645,560**
DEL Budget	(546,243)	(48,849)	(595,092)	(39,774)	(3,099)	(42,873)	(19,887)	(657,852)
(Underspend)/overspend	(3,297)	(3,820)	(7,117)	(4,913)	(705)	(5,618)	443	(12,292)

* capital contribution re the Francis Crick Institute

Table 10: Reconciliation of finance tables to Annual Accounts

	Account Note	2013/14 Programme £000	2013/14 Admin £000	2013/14 Capital £000	2013/14 Total £000	2012/13 Total £000
External Income						
Contributions from other government departments	4	(20,180)	(2)	0	(20,182)	(36,596)
Contributions and grants from other bodies	5	(60,329)	(83)	(2,967)	(63,379)	(64,514)
Other Income	6	(3,472)	(10)		(3,482)	(3,616)
Interest Receivable	7	(38)	0		(38)	(32)
External Income per Finance Table		**(84,019)**	**(95)**	**(2,967)**	**(87,081)**	**(104,758)**
Other Finance Income						
Total Other Finance Income	9f	1,381	0	0	1,381	(16,695)
Less IAS 19 pension income adjustments	9e	(1,381)	0	0	(1,381)	16,695
Other Finance Income		**0**	**0**	**0**	**0**	**0**
Pay and Operating Costs						
Staff Costs	8	128,710	14,387	0	143,097	155,501
Less: IAS 19 current service costs		5,868	0	0	5,868	(3,508)
Other expenditure	10	105,943	10,291	0	116,234	150,043
Commercial Activities	15	41,684	0	0	41,684	49,911
Pay and operating costs per Finance Table		**282,205**	**24,678**	**0**	**306,883**	**351,947**
Impairment of property, plant and equipment						
Impairment of property plant and equipment	17	7,768			7,768	16,896
Less Amount charged to AME not DEL					0	(12,962)
Impairment of ppe per Finance Table		**7,768**	**0**	**0**	**7,768**	**3,934**
Provision Movement						
Amount provided in year (charged to AME not DEL)	24	(2,069)			(2,069)	(2,714)
Less Amount expended in year (DEL Charge)	24	2,872			2,872	1,096
Provision movement per Finance Table		**803**	**0**	**0**	**803**	**(1,618)**

Table 10: Reconciliation of finance tables to Annual Accounts (continued)

	Account Note	2013/14 Programme £000	Admin £000	Capital £000	Total £000	2012/13 Total £000
Research Grants						
Research Grants	11	232,851	0	39,650	272,501	243,118
Other Research	12	127,126	0	37,110	164,236	91,484
Postgraduate training awards	13	69,910	0	0	69,910	79,483
Research grants per Finance Table		**429,887**	**0**	**76,760**	**506,647**	**414,085**
Direct Capital						
Property, plant & equipment additions	17			27,088	27,088	20,243
Intangible asset addition – software licences	16			312	312	22
Plus investment in Joint Ventures addition	18			114,504	114,504	60,675
Less net book value of disposed property, plant & equipment	17			(32,165)	(32,165)	(1,180)
Less net book value of disposed software licences	16			(14)	(14)	0
Less net book value of disposal of investment in joint venture	18			0	0	(10,318)
Direct Capital per Finance Table		**0**	**0**	**109,725**	**109,725**	**69,442**

MRC financial results for the year

- The statement of comprehensive net expenditure records a net expenditure of £700.9m (2012/13 = £635.6m).
- The parliamentary grant-in-aid totalled £725.5m (2012/13 = £655.9m).
- Total income amounted to £172.5m (2012/13 = £196.4m), staff costs totalled £143.1m (2012/13 = £155.5m), other expenditure excluding depreciation totalled £116.2m (2012/13 = £150.0m) and expenditure on research grants totalled £272.5m (2012/13 = £243.1m).
- Total asset (non-current assets and current assets) values increased by £31.2m (2012/13 = £34.9 m decrease), while current liabilities decreased by £14.0m (2012/13 = £10.0m decrease).
- Reserves, excluding the general reserve, showed a net increase of £74.3m (2012/13 = decrease £107.7m).
- General reserves increased by £78.9m (2012/13 = £29.6m increase).
- Total government funds at 31 March 2014 stood at £680.4m (31 March 2013 = £527.2m) (Statement of Changes in Taxpayers' Equity).

Income and expenditure are recognised in the Statement of Comprehensive Net Expenditure on an accruals basis (i.e. when the recipient has fulfilled its obligations, such as carried out a period of research). Grant-in-aid is credited to reserves. Note 27 of the financial statements shows capital commitments of £43.0m (2012/13 £164.4m) and forward commitments on research awards to higher education research institutes of £883.5m (2012/13 £976.7m). 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 2014 shows a pension surplus of £73.7m (2012/13 deficit (£34.0m). This is the measure of the surplus / (deficit) in the pension scheme as valued at Statement of Financial Position date under IAS 19 –Employee Benefits. Full disclosure is given at Note 9 in the annual accounts.

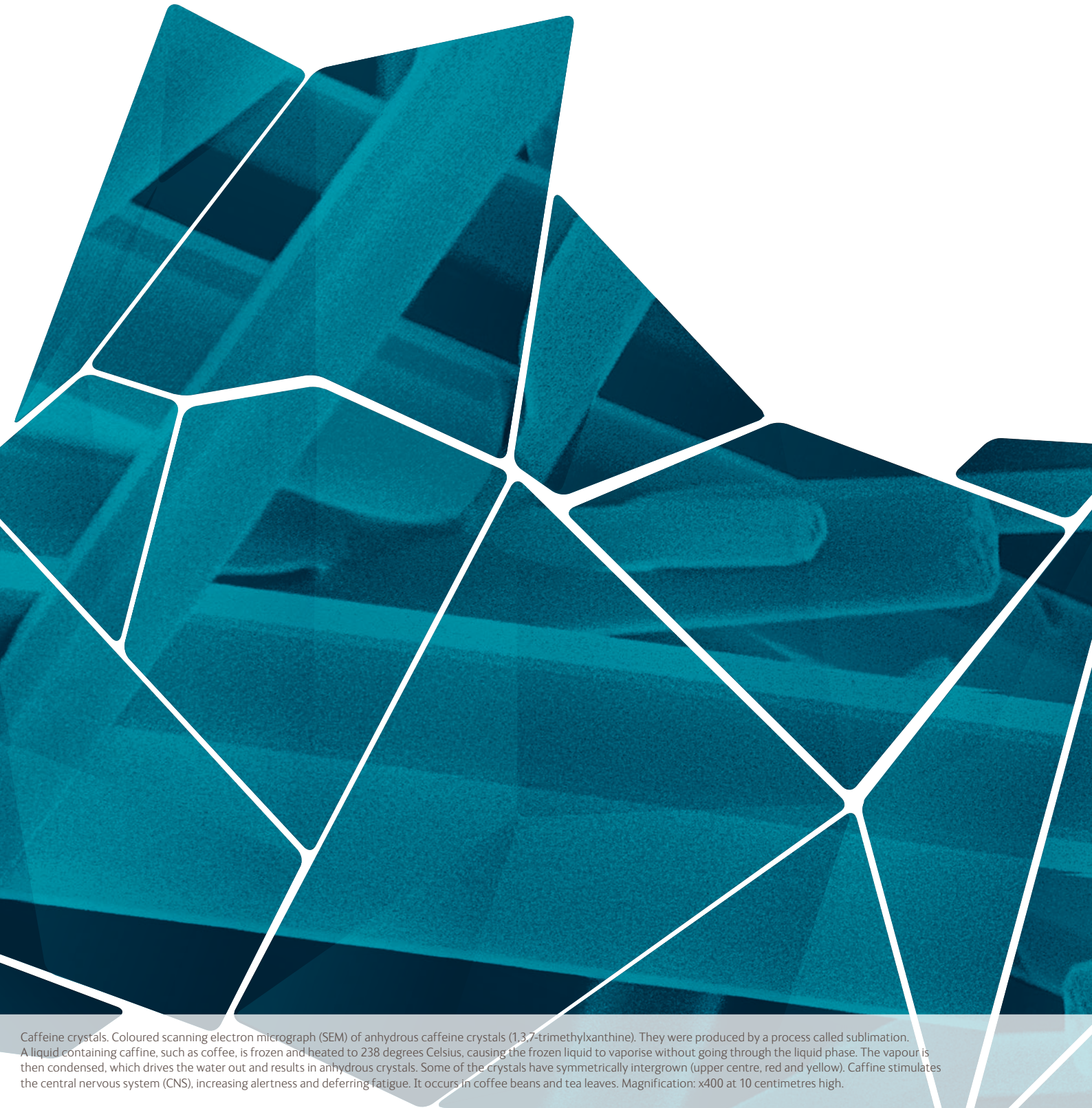
MRC creditor payment policy

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 2013/14 the MRC paid 75.6 per cent (2012/13 = 87.0 per cent) of invoices within 5 days. The Prompt Payers Code can be found at **www.payontime.co.uk**.

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 2013/14 was £175,000 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
Accounting Officer/Chief Executive Officer
Medical Research Council
Date: 1 July 2014



Caffeine crystals. Coloured scanning electron micrograph (SEM) of anhydrous caffeine crystals (1,3,7-trimethylxanthine). They were produced by a process called sublimation. A liquid containing caffine, such as coffee, is frozen and heated to 238 degrees Celsius, causing the frozen liquid to vaporise without going through the liquid phase. The vapour is then condensed, which drives the water out and results in anhydrous crystals. Some of the crystals have symmetrically intergrown (upper centre, red and yellow). Caffine stimulates the central nervous system (CNS), increasing alertness and deferring fatigue. It occurs in coffee beans and tea leaves. Magnification: x400 at 10 centimetres high.

Remuneration report

Remuneration report

Remuneration Committee

(unaudited information)

Remuneration of the Head Office directors and of the heads of the MRC's units and institutes is reviewed by the MRC Remuneration Committee, the membership of which during 2013/14 was:

- Mr Donald Brydon, Chairman
- Sir John Savill, MRC Chief Executive
- Professor Paul Morgan, University of Cardiff and Council member
- Professor Michael Arthur, University College London and Council member
- Professor Richard Henderson, MRC Laboratory of Molecular Biology and Council member
- Professor Chris Day, University of Newcastle and Council member

Bruce Minty (MRC Chief Operating Officer), Ted Smith (MRC Group Human Resources Director) and Rebecca Leigh (MRC Head of Reward and Recognition) 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 by the Remuneration Committee. Pay above £100k per annum is approved by the BIS Senior Remuneration Oversight Committee (SROC) in addition to the MRC Remuneration Committee.

2013/14 marked the fifth year of pay restraint for the MRC. When not in a pay freeze, the Remuneration Committee makes reference to the changes made for all other staff in the MRC when agreeing pay rises for the senior employees; 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, and 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 (branded Special Award Scheme), which allows for a maximum 10 per cent of annual salary payment for exceptional employee contributions, paid as a one-off non-consolidated payment at the end of year or a smaller quantum in-year.

Senior scientific staff are appointed on open-ended contracts, 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 Redundancy Scheme.

Senior staff remuneration

(audited information)

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

A summary of the level of remuneration for the MRC's Management Board is shown in table 12. The levels of honoraria for MRC Council members are also shown below.

Chief Executive

The performance management and remuneration arrangements for the Chief Executive are established and managed by the Department for Business, Innovation, and Skills (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.

At the beginning of each year, the Director General Knowledge and Innovation 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 Director General, with advice from colleagues and the BIS Senior Remuneration Oversight Committee (SROC), agrees the assessment of overall performance and specific achievements against objectives for annual and appointment term objectives.

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 Director General may recommend a reduced bonus to be paid depending on the circumstances.

The Chief Executive was an ordinary member of the MRC's pension scheme until the end of March 2012 when he withdrew. Entitlements under conditions of service are the same as those for other members of staff and, should his contract be terminated early, he would be entitled to compensation under the terms of the MRC Redundancy Scheme. These individuals do not have any specific contractual rights for termination of their contract.

Table 11: Senior staff contracts

Chief Executive and Directors	Contract Start Date	Contract End Date	Notice Period
Professor Sir John Savill Chief Executive	1st Oct 2010	30 April 2016	3 months
Dr Wendy Ewart Deputy Chief Executive and Chief of Strategy	Permanent contract	31 March 2014	3 months
Mr B Minty Chief Operating Officer	Permanent contract	-	3 months
Dr D Mulkeen Chief Science Officer	Permanent contract	-	3 months
Mr T Smith Director of Human Resources	Permanent contract	-	3 months
Mr H Dunlop Director of Finance	Permanent contract	-	3 months
Mr A Bulger Director of Major Projects	Permanent contract	-	3 months
Dr A C Peatfield Director of Corporate Affairs	Permanent contract	-	3 months

Salary including performance-related pay

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

Hutton Report

The Hutton Report requires the MRC to calculate the mid-point of the banded remuneration of the highest paid director, and the ratio between this and the median. The calculation is based on the full-time equivalent on an annualised basis. MRC Median pay is £31,816 (2012/13 – £30,227). The Chief Executive's full time equivalent pay as a multiple of median pay is 5.42 (2012/13 – 5.21).

Cash Equivalent Transfer Values

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

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

Real increase in Cash Equivalent Transfer Values

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

Table 12: Senior staff remuneration (audited information)

	2013/14				2012/13			
	Remuneration	Bonus	Pension benefit	Total	Remuneration	Bonus	Pension benefit	Total
	£000	£000	£000	£000	£000	£000	£000	£000
Professor Sir John Savill								
Chief Executive	125-130	0-5	0-5	130-135	120-125	0-5	0-5	125-130
Dr Wendy Ewart								
Deputy Chief Executive and Chief of Strategy	115-120	10-15	50-55	180-185	120-125	-	95-100	215-220
Mr B Minty								
Chief Operating Officer	140-145	10-15	35-40	185-190	135-140	-	35-40	175-180
Dr D Mulkeen								
Chief Science Officer	105-110	5-10	40-45	150-155	100-105	-	40-45	140-145
Mr T Smith								
Director of Human Resources	145-150	5-10	30-35	185-190	140-145	10-15	30-35	185-190
Mr H Dunlop								
Director of Finance	105-110	-	165-170	270-275	85-90	-	110-115	200-205
Mr A Bulger								
Director of Major Projects	125-130	5-10	25-30	160-165	120-125	5-10	25-30	160-165
Dr A C Peatfield								
Director of Corporate Affairs	105-110	-	40-45	150-155	105-110	-	50-55	155-160

Remuneration includes any allowances but not benefits in kind or employers pension contribution. There were no benefits in kind paid in the year.

The Total Figure of Remuneration includes a notional value in respect of pension benefits accrued for the year calculated similar to the method used to derive pension values for tax purposes under the Life Time Allowance (LTA). It is calculated: (increase in pension* x 20) + (increase in any lump sum*) less (contributions made by member). This amount is not reflected in salary payments to individuals and can never be paid as cash. The LTA for the period covered by this report was £1.5m (one million, five hundred thousand pounds).

Sir John Savill works part-time and his full year equivalent salary is £160-165k.

Table 13: Senior staff pension (audited information)

	Accrued pension at Retirement Age as at 31.3.14 and (Lump sum) £000	Real increase/ (decrease) in pension and related lump sum at retirement age £000	CETV at 31.3.14 or date left £000	CETV at 31.3.13 £000	Real increase/ (decrease) in CETV £000
Professor Sir John Savill	0-2.5 plus	0-2.5 plus	0	0	0
Chief Executive	0-2.5 lump sum	0-2.5 lump sum			
Dr Wendy Ewart	10-12.5 plus	2.5-5 plus	259	188	71
Deputy Chief Executive and Chief of Strategy	35-37.5 lump sum	7.5-10 lump sum			
Mr B Minty	5- 7.5 plus	0-2.5 plus	126	89	37
Chief Operating Officer	20-22.5 lump sum	5-7.5 lump sum			
Dr D Mulkeen	32.5-35 plus	0-2.5 plus	560	538	22
Chief Science Officer	97.5-100 lump sum	5-7.5 lump sum			
Mr T Smith	7.5-10 plus	0-2.5 plus	128	99	29
Director of Human Resources	22.5-25 lump sum	5-7.5 lump sum			
Mr H Dunlop	37.5-40 plus	7.5-10 plus	683	556	127
Director of Finance	115-117.5 lump sum	22.5-25 lump sum			
Mr A Bulger	5-7.5 plus	0-2.5 plus	140	105	35
Director of Major Projects	20-22.5 lump sum	2.5-5 lump sum			
Dr A C Peatfield	37.5-40 plus	2-2.5 plus	756	671	85
Director of Corporate Affairs	112.5-115 lump sum	5- 7.5 lump sum			

Pensions and lump sums are those calculated as at retirement age or date of leaving

Details of the MRC Pension Scheme appear in Note 9 of the Annual Account
Dr Wendy Ewart retired from the MRC on 31 March 2014

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 (OCPA). The normal period of appointment is four years, and members may be re-appointed for one further four-year term.

No new Council members were appointed during 2013/14.

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 14 below.

Dr Ruth McKernan chose not to draw her 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 Jeremy Clayton did not receive an honorarium.

Table 14: Council honoraria 2013/14 (audited information)

Member	Position/Affiliation	Annual Honoraria	
		2013/14 £000	2012/13 £000
Mr Donald Brydon	Chairman	15-20	0-5
Professor Jeffrey Almond	Visiting Professor, Oxford and Reading	5-10	5-10
Professor Michael Arthur	University College London	5-10	5-10
Mr Tony Caplin	Alternative Networks PLC/Public Works Loan Board	5-10	5-10
Professor Dame Sally Davies	Department of Health	-	-
Professor Chris Day	Newcastle University	5-10	5-10
Dr Richard Henderson	MRC Laboratory of Molecular Biology, Cambridge	-	-
Professor Dame Sally Macintyre	University of Glasgow	5-10	5-10
Dr Ruth McKernan	Pfizer, Cambridge	-	-
Professor Paul Morgan	Cardiff University	5-10	5-10
Baroness Onora O'Neill	House of Lords	5-10	0-5
Dr Menelas Pangalos	Astra Zeneca, Cheshire	5-10	-
Ms Vivienne Parry	Writer and Broadcaster, London	5-10	5-10
Professor Michael Schneider	Imperial College London	5-10	5-10

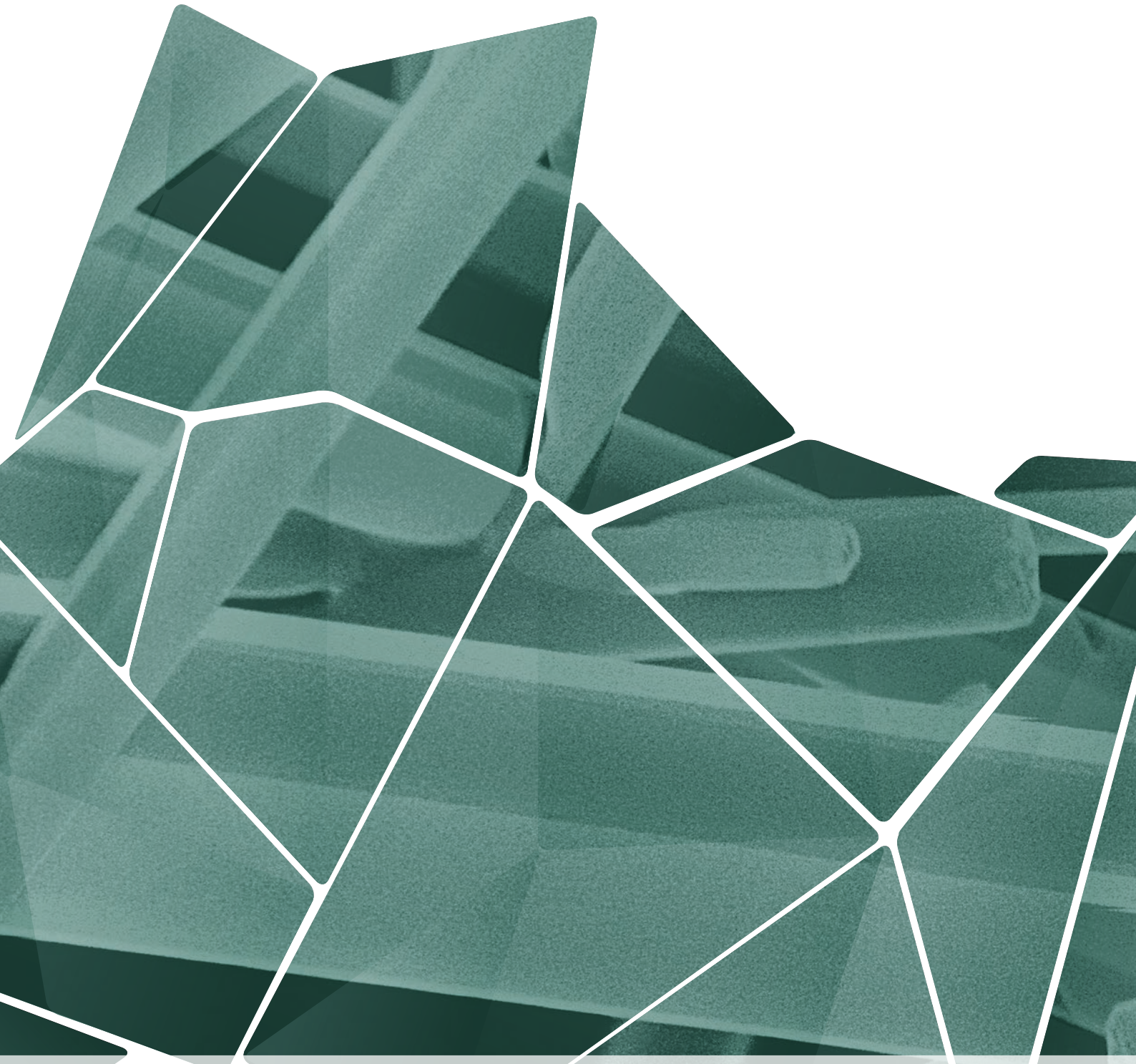
Mr Tony Caplin resigned on 19 April 2014

Declared interests

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. Of the members of Management Board, Sir John Savill works for the University of Edinburgh for 16 hours per week. Declan Mulkeen is a board member of MRCT (MRC Technology). Dr Wendy Ewart was a board member of UK Biobank, a board member of the Francis Crick Institute, and is a Trustee of the Alexander Ewart Fund for Nepal. Ted Smith was Chairman and Trustee of HCS Group Charity (a publicly funded careers service provider) until December 2013 and is a Director of the dormant company UKHR.

Sir John Savill
Accounting Officer/Chief Executive Officer
Medical Research Council
Date: 1 July 2014



Caffeine crystals. Coloured scanning electron micrograph (SEM) of anhydrous caffeine crystals (1,3,7-trimethylxanthine). They were produced by a process called sublimation. A liquid containing caffine, such as coffee, is frozen and heated to 238 degrees Celsius, causing the frozen liquid to vaporise without going through the liquid phase. The vapour is then condensed, which drives the water out and results in anhydrous crystals. Some of the crystals have symmetrically intergrown (upper centre, red and yellow). Caffine stimulates the central nervous system (CNS), increasing alertness and deferring fatigue. It occurs in coffee beans and tea leaves. Magnification: x400 at 10 centimetres high.

Financial statements

MRC Financial Statements

Year ended 31 March 2014

Statement of the Council and Chief Executive's responsibilities

The financial statements presented are the accounts of the Medical Research Council.

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 issued 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.

MRC Governance Statement 2013/14

1 Introduction

This Governance Statement for 2013/14 explains the way in which the Medical Research Council (MRC) Governance Framework operates and details results from the review processes which enable me to have confidence in the effectiveness of the controls.

The MRC is an independent non-departmental public body of the Department for Business Innovation & Skills (BIS). Ultimately the MRC is accountable to the public through Parliament for the funds it expends. Parliament monitors and influences the Council's work through Committees and the NAO.

The MRC, together with the other Research Councils, is reliant on the UK Shared Business Services Ltd (SBS), formerly called Research Councils UK Shared Service Centre (SSC) for the provision of administration systems, and this statement also explains the oversight and assurance process and results for the service supplied.

2 The Governance framework/structure

The MRC Governance framework includes Council, the Council Audit and Risk Assurance Committee (CARAC), the Council Finance Committee (CFC), Management Board, Strategy Board, Operations Board and other fora, senior management, officials and staff. The MRC's decision-making and advisory bodies are described below.

2.1 The MRC's **Council** meets five times a year. Council directs and oversees corporate policy and science strategy, decides all issues of major importance including issues of corporate strategy, sets key strategic objectives and targets, makes major decisions involving the use of financial and other resources, and ensures the organisation is effectively managed. Council members have a corporate responsibility for ensuring that the Council's decisions are well founded and comply with any statutory or administrative requirements for the use of public funds.

2.2 **Council appointments** – Council is led by the Chairman, with the MRC Chief Executive as Deputy Chairman and 13 other members, at least half of whom are appointed on account of their scientific qualifications. Council members are appointed by and accountable to the Secretary of State for Business, Innovation and Skills in accordance with the Code of Practice for Ministerial Appointments to Public Bodies.

2.3 **Changes to Council** – there were no changes to Council during the financial year. Mr Caplin resigned on 19th April 2014 following the discovery that he had failed to make a necessary disclosure of a change in his personal circumstances required under the terms of his appointment to the Council. His honorarium ceased immediately upon his resignation and no further payments were made to him. There is no evidence that this change in circumstance had impacted in any way on his performance as a member of Council.

Main activities for 2013/14[13]:

- Reviewing delivery of the commitments in the MRC strategic plan, and other items of strategic importance;
- Advising on overall strategic direction approving the final draft of the new strategic plan *Research Changes Lives 2014-2019*:
- Reviewing and approving decisions on MRC intramural investments including decisions regarding the transfer of MRC units to university units;
- Reviewing progress with major initiatives including the Francis Crick Institute;
- Reviewing and approving financial plans and performance;
- Reviewing and approving operational activities;
- Receiving reports from subcommittees including the Council Audit and Risk Assurance Committee, the Council Finance Committee, the Ethics, Regulation and Public Involvement Committee, the Remuneration Committee and the Nominations Committee.

Review of effectiveness

Council carried out a review of effectiveness in October 2013.

2.4 Council is supported in its role by a number of boards and subcommittees[14]. There are five subcommittees made up of Council members and supplemented, where appropriate, with other members bringing specialised expertise and knowledge. Subcommittees have responsibility for specific areas of Council's remit; in some cases authority is delegated to them to act on behalf of Council, and in other cases they are acting in an advisory capacity either to Council (Ethics, Regulation and Public Involvement Committee (ERPIC)) or to the Chairman (Nominations Committee). Council is also advised by an Employee Representation Forum.

2.5 The Council Audit and Finance Committee was reformed into two separate committees at the beginning of the year – **Council Audit and Risk Assurance Committee (CARAC)** and **Council Finance Committee (CFC)**. The two committees are both chaired by the same member of Council and have the majority of members in common. The terms of reference were revised to reflect the separate roles and latest guidance on CARAC from HM Treasury.

2.6 **CARAC** met five times in 2013/14. It supports and advises Council and the Chief Executive on matters of governance, risk and control. Meetings are attended by representatives from the National Audit Office (NAO) and the Research Council's Audit and Assurance Service Group (AASG).

2.7 **CFC** met five times. It supports and advises Council and the Chief Executive on financial matters. In March 2014, Council agreed an extension to the CFC's terms of reference to encompass providing advice to the Chief Executive on material, unplanned expenditure.

2.8 **Changes to CARAC and CFC** – one member retired during the year and two new members were appointed.

2.9 The committees are authorised by Council to investigate any activity within their terms of reference.

13. Agenda and redacted minutes are available on the MRC website.
14. The terms of reference and membership of the committees are available on the MRC website www.mrc.ac.uk/About/Structure/Council/CouncilCommittees/index.htm

CARAC main activities for 2013/14:

- Reviewing audit reports and tracking implementation of recommendations
- Detailed scrutiny of annual accounts
- Oversight of risk management with particular emphasis on corporate and fraud risks
- Review of information assurance and information security
- Review of assurance process and findings
- Review of Researchfish, MRC's electronic evaluation tools.
- Monitoring of major programmes.

CFC main activities for 2013/14:

- Reviewing financial reports on outturn against budget
- Providing oversight and making recommendations to Council on the University unit transfers programme by reviewing gateway documents.

Review of effectiveness

CARAC carried out a review of effectiveness in April 2013.

2.10 The **Remuneration Committee (RemCom)** reports to Council and met in October 2013 and March 2014. It is chaired by the MRC Chairman and there are four additional members, who are all Council members. The committee normally meets in person as and when required. The MRC Chief Executive, the Chief Operating Officer and the HR Director are also invited to attend and advise RemCom. RemCom reviews the HR Strategy, in particular the pay, grading and bonus arrangements for the most senior staff. All proposals for salaries above £100k per annum have to be approved by the BIS' Senior Remuneration Oversight Committee (SROC) in addition to RemCom.

2.11 The **Ethics, Regulation and Public Involvement Committee (ERPIC)** is chaired by Baroness O'Neill of Bengarve and currently has nine other members. It is an advisory committee which meets twice a year and reports to Council.

2.12 The **Nominations Committee (NomCom)** reports to Council. It is chaired by the MRC Chairman and there are four additional members. NomCom advises the Chairman on senior key appointments and meets as and when required. NomCom met twice in 2013/14 to advise the Chairman on the succession planning and on applications for Council membership. In March 2014 Council agreed new terms of reference for NomCom which now incorporate advice to the CEO and Chairman on Management Board appointments and advice to the chairman on membership of council subcommittees.

2.13 **Strategy Board** meets eight times a year, is chaired by the CEO and is responsible for developing, coordinating, and overseeing the implementation of and evaluating the MRC's strategic plans. Membership includes the Chair of each of the Research Boards and Strategic Overview Groups plus an MRC institute director and a representative of the extramural programme. Strategy Board reports to Council and has a budget delegated by Council for strategic awards.

2.14 The four **Research Boards** each meet three times a year and are responsible for one of the four major areas of medical science that together make up the MRC portfolio. They, together with expert funding committees, are responsible for assessing applications for research funding and have delegated budgets for new awards. There are four strategic overview groups (Training and Careers, Global Health, Translational Research and Population Health Sciences Group) which are responsible for ensuring that the MRC's activities in these key areas are well coordinated and strategically positioned.

Council and Committee attendance, 1 April 2013 – 31 March 2014

	Attendance					
Name of Member	**Council**	**RemCom**	**CARAC**	**CFC**	**ERPIC**	**NomCom**
Prof Jeffrey Almond	5/5					2/2
Prof Michael Arthur	4/5	1/1	3/5	3/5		
Mr Donald Brydon[15]	5/5	1/1	2/5	2/5		2/2
Mr Tony Caplin	4/5		5/5	5/5		
Prof Dame Sally Davies	2/5					
Prof Chris Day	4/5					1/2
Dr Richard Henderson	4/5	1/1	4/5	4/5		
Prof Dame Sally Macintyre	4/5					2/2
Professor Paul Morgan	4/5	1/1				
Baroness Onora O'Neill	5/5				2/2	
Dr Menelas Pangalos	3/5					
Mrs Vivienne Parry	5/5				1/2	2/2
Dr Ruth McKernan	4/5					
Prof Sir John Savill[16]	5/5	1/1	3/5	3/5		
Prof Michael Schneider	4/5					
Ms Anna Anderson			4/5	4/5		
Ms Gill Noble[17]			2/2	2/2		
Ms Rima Makarem			4/5			
Mr Alastair Hewgill			5/5	5/5		
Mr John Jeans			1/5			
Mr Roger Dunshea[18]			3/3	3/3		
Mr Andrew Murphy			3/3	3/3		

Key
- Council member
- Independent CARAC members
- ☐ Management

15. Mr Donald Brydon also chairs RemCcom and NomCom
16. Prof Sir John Savill is the Chief Executive and Deputy Chair of Council
17. Ms Noble retired in June 2013
18. Mr Dunshea and Mr Murphy were appointed in November 2013

MRC compliance with the Corporate Governance Code

2.15 The MRC operates in compliance with the Corporate Governance Code in so far as it applies to Arm's Length Bodies.

Management Board

2.16 Management Board is the MRC's principal executive decision-making body. It meets monthly and is accountable to Council through the Chief Executive. It is chaired by the Chief Executive and comprises the Deputy Chief Executive and Director of Strategy, the Chief Operating Officer, and other corporate directors.

2.17 Operations Board is the MRC's principal body for operational decisions. It meets monthly and is chaired by the Chief Operating Officer and includes representatives from each corporate directorate and Senior Unit Administrators representing the units.

Partner Organisations

2.18 The MRC is a key funder in a number of partnerships. MRC's interests in each of these partnerships is governed via a Joint Venture Agreement or by contracts. Separate companies have been established and the MRC has a nominated Director on each board. The governance arrangements for these partnerships are subject to review by AASG on a rolling programme, in the last year MRCT and Imanova have been reviewed and received substantial assurance.
The partnerships are:

- UK BioBank
- Imanova
- The Francis Crick Institute (The Crick)
- MRCT

2.19 Other key funded partnerships:

- MRC university units – during 2013/14 the MRC transferred 11 of its units to university ownership.
  The university units are governed by strategic alliance agreements and have specific assurance arrangements.
  These arrangements are subject to audit by AASG.
- Whilst the detail for each partnership may differ, the MRC has appropriate agreements in place and actively engages through representation at senior level. Our risk and assurance frameworks ensure that matters emanating from these activities are reported and that issues are responded to in an appropriate manner.

3 The risk and internal control framework

The MRC believes that identifying and managing risks and opportunities plays a critical part in the effective and efficient delivery of the MRC's long-term organisational objectives, creating confidence and trust within the scientific community and the general public and enables better planning for the future.

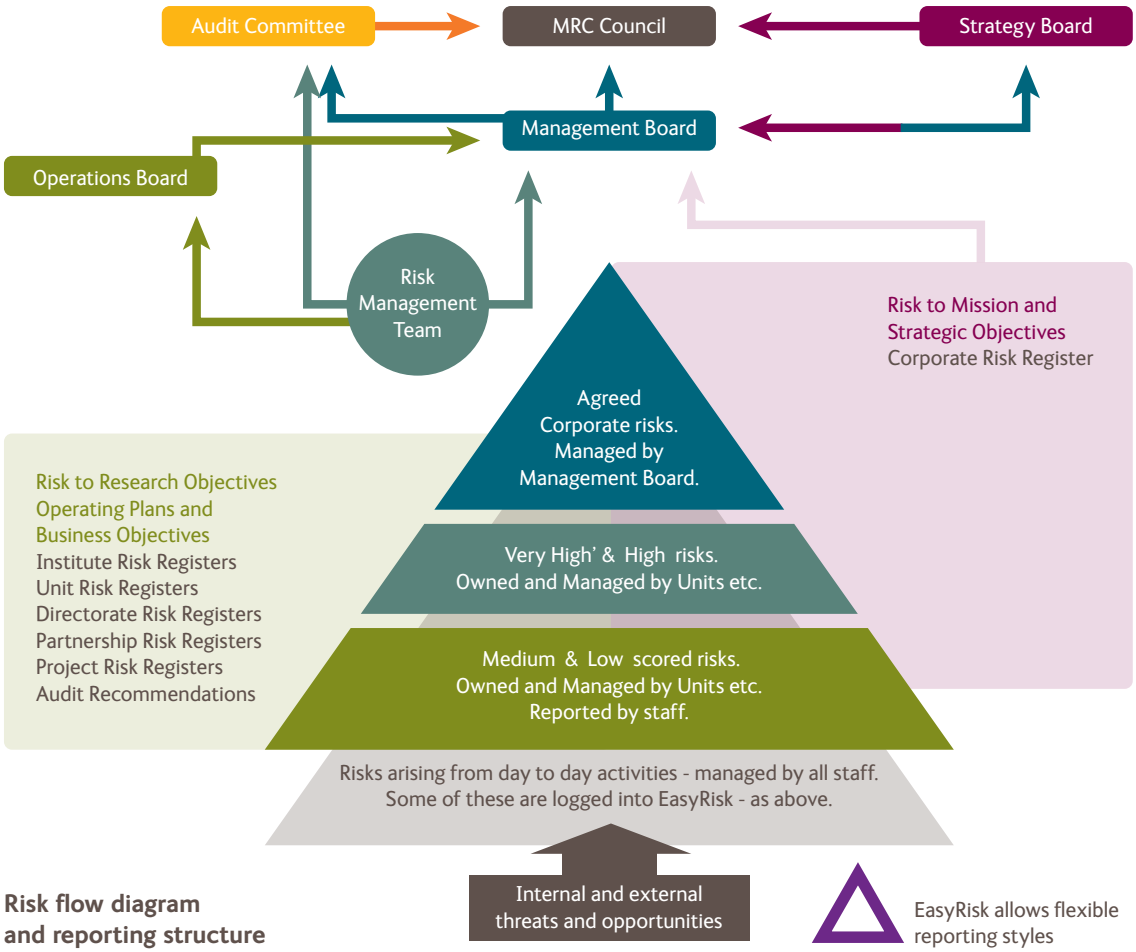
The risk and assurance team acts as a central point for training, advice and guidance on risk management. This team also co-ordinates the corporate and fraud risks, which are reviewed regularly by Management Board prior to reporting to CARAC and Council.

The **Directors Annual Statement of Internal Controls** (see section 11.5) responses are collated and reviewed by the risk and assurance management team prior to validation by corporate leads.

All managers are responsible for ensuring that significant risks are identified, that appropriate mitigating action is implemented and all information is recorded and updated in the MRC's risk management software. The risk and assurance team provide challenge and support to ensure that risks are appropriately rated and updated.

There is a system for escalating all risks that exceed the MRC risk appetite to Operations Board and/or Management Board for discussion.

Overview of the risk management and escalation process



Risk flow diagram and reporting structure

3.1 All decision papers to Council, Management Board and Strategy Board require a statement on the risks relevant to the decision.

3.2 The Head of Risk and Assurance Management regularly reviews risks with corporate directors, unit managers and programme boards.

3.3 The risk and assurance management team provide a mix of training courses and workshops to support staff, and training needs are reviewed annually.

3.4 The MRC uses the "EasyRisk" risk management software to record and track all risks and audit recommendations.

4 Fraud and error risk management

4.1 The MRC is committed to standards of regularity and propriety and does not tolerate any form of fraud, bribery and/or corruption.

4.2 The MRC has to meet the requirements of the government fraud and error initiative and has submitted an organisation capacity assessment and action plan to BIS.

4.3 The MRC has a detailed fraud and error risk register that is reviewed regularly by Management Board, CARAC and Council.

4.4 The arrangements for fraud and error risk management were audited during the year the MRC received a rating of substantial assurance.

4.5 The MRC's activities on fraud and error have built upon the MRC approach to Managing Risk of Financial loss.

4.6 There is a mandatory e-learning programme on fraud and bribery for all senior and high risk areas staff.

4.7 All fraud reports are reviewed by CARAC.

4.8 One fraud was identified at our Gambian unit and dealt with appropriately. Although unwelcome it did not represent a material loss of financial control.

5 Information assurance and information security

5.1 The management of information risks is fully integrated within the risk management process, the Director of Information and Systems is the MRC's Senior Information Risk Owner.

5.2 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 twelve areas. The results of the annual review together with any actions are reported to operations board and CARAC.

5.3 The MRC submits an annual return to BIS confirming compliance with the relevant requirements set out in the Security Risk Management Overview that feeds into the HMG Security Policy Framework. The return reflects an assessment of specific information assurance risk areas that are consistent with the risks recorded in the council's risk register together with any areas of concern.

5.4 The MRC has adopted the Cabinet Office policy on Government Security Classifications (GCS). The MRC has produced its own guidance to support the policy and has ensured that all relevant staff have received appropriate training.

Personal data incidents

5.5 I can confirm that there are no information security incidents that have needed to be reported to BIS or the Information Commissioner.

6 Transparency

In line with Government's commitment to greater transparency of public information, the MRC publishes information on how we spend the public funding we receive. Information on senior staff pay, management and staffing structures, spending over £25,000 and transactions on Government Procurement Cards over £500 is routinely published on our website and is also accessible on **www.data.gov.uk**. All new contractor and consultancy appointments are vetted to ensure that they are not deliberately avoiding paying appropriate tax and NI. All contract renewals have to provide the MRC with the same assurances. Data are presented for the MRC's research units and institutes, head office, regional administrative centres and research facilities.

The MRC, jointly with the other research councils, has participated in the Gateway to Research project. This project provides a website with information about the research that the councils have funded, together with the associated outputs and outcomes. It is part of the BIS Innovation and Research Strategy and was launched at the end of 2013.

6.1 Ministerial directions

There were no Ministerial directions given in 2013/14.

7 Austerity measures

The MRC has robust control processes, checks and reporting arrangements in place to review and manage expenditure in keeping with the austerity measures introduced in May 2010.

8 Tax assurance

The Alexander Review was published in May 2012 making a number of recommendations to ensure that the highest standards of integrity could be demonstrated in the tax arrangements of senior public appointees. I can confirm that MRC's senior staff are all paid through the payroll and that arrangements are in place through retained HR to provide assurance that appropriate tax arrangements are in place to cover any other appointees covered by the report.

In 2013/14 MRC identified 29 Contractors who fell within the Alexander Review criteria. MRC has sought and gained assurance that the appropriate tax arrangements are in place for the contractors identified.

Council members are 'office holders' as defined within HMRC guidance, and their remuneration is subject to income tax and National Insurance contributions under PAYE where applicable and managed through the payroll

As such, the MRC is in compliance with the recommendations in the HM Treasury 'Review of the tax arrangements of public sector appointees' published in May 2012.

9 Macpherson Review

The review of quality assurance of Government analytical models undertaken by Sir Nicholas Macpherson and published by HM Treasury in March 2013 made a number of recommendations for government departments and their Arm's Length Bodies.

Following this Review, the MRC reviewed its use of analytical modelling and did not identify any that were considered to be business critical. This was communicated to BIS and I can confirm that MRC complies with the requirements set out in Howard Orme's letter dated 15th May 2013.

10 Research integrity

10.1 MRC Council receives an annual report on research integrity, including information on any cases of misconduct relevant to MRC funded work. A summary report formed part of the first annual RCUK report on research integrity published in January 2014 in line with responsibilities agreed under the UUK Concordat to support research integrity.

10.2 The MRC aims to be a leading body in evaluation and in capturing of outcomes of funding research through comprehensive use of Researchfish, and funding independent and external research into outcomes and impacts.

11 Review of effectiveness

11.1 As the MRC Accounting Officer I have responsibility for reviewing the effectiveness of the system of governance, risk management and internal control. This 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 Management Board, the Council Audit and Risk Assurance Committee and have developed plans to address weaknesses and ensure that continuous improvement of the system is in place. This Governance Statement represents the end product of the review of the effectiveness of the governance framework, risk management and internal control.

11.2 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 2013/14 shows that overall risk management has remained stable

11.3 The policy and process for risk management were audited during the year and received substantial assurance with no recommendations for change.

11.4 The arrangements for fraud risk management were audited during the year the MRC received substantial assurance, with five recommendations for improvements, including updating the fraud policy.

Directors' Annual Statement of Internal Control (DASIC)

11.5 All MRC directors (unit, and head office) provide an annual assurance statement (DASIC) on their areas of responsibility. These returns provide an overall positive assessment on the compliance with policies and systems of internal control.

11.6 Returns have also been required from the three overseas offices that the MRC manage on behalf of all research councils.

11.7 All units now embedded in universities have been asked to provide an University Unit Assurance Statement, similar to the DASIC statement

11.8 All returns are reviewed and validated by corporate leads for each area of responsibility before being considered by Operations Board and CARAC. Any weaknesses in controls are risk assessed and appropriate action plans put in place.

12 Current significant risks

The current risks to MRC are:

- HR records – accuracy and retention.
- Establishment of the Crick
- Assurance on UKSBS

13 Assurance

Audit and Assurance Service Group (AASG)

13.1 In 2013/14 the Head of Internal Audit provided the MRC with an overall substantial level of assurance on the adequacy and effectiveness of MRC's controls framework.

13.2 The internal audit programme is developed annually in consultation with CARAC, Management Board and the Head of Risk Management.

13.3 The outcomes of all audits are discussed at CARAC.

13.4 The MRC has a comprehensive system for tracking implementation of audit recommendations. Progress on implementation is reviewed at Operations Board and CARAC, at least quarterly. This process has been commended by AASG.

African units

13.5 There have been 2 audits both highlighting issues with the controls framework across key systems.
The implementation of all recommendations are being addressed by management and monitored by the CARAC.
A key element to improving the controls is the completion of the project to introduce a new finance system common to both units and visible in the UK. The new system went live in the last quarter of the year.

Information and IT assurance

13.6 The MRC has also taken part in four cross-council audits on information and IT assurance. For the MRC two of the reports received limited assurance.
The subjects covered are:

- Critical systems assurance
- External IT suppliers.

These are being collectively followed up by the councils and with UK SBS Ltd via the IS customer governance forum.

UK Shared Business Services Ltd (SBS) assurance

13.7 The annual Governance Statement has to record the level of assurance received in respect of the work carried out by UK SBS Ltd on behalf of the research councils. In past years this assurance has been recorded through the AASG report and commentary from the research council's Client Services Group (CSG) which oversaw the UKSBS Ltd/ research council relationship and provided a report for the AGS. Reports on AASG activity and CSG review are still included in this AGS but the CSG role has altered as direct ownership and control of UK SBS Ltd has passed from the research councils to BIS (Business Innovation and Skills).

13.8 This year the Chief Executive Officer of UKSBS Ltd has provided assurance directly to research council accounting officers. In a letter dated 24 April 2014 the CEO of UK SBS Ltd provided a personal assurance that the shared service had operated properly during the year. The letter provides a detailed commentary in ten specific areas listed below:

- Significant challenges faced by the business in 2013/14
- Progress against audit recommendations
- The company's risk management and internal control and compliance arrangements including details of the top risks facing the business
- The company's performance against its critical performance indicators (CPI)
- Counter fraud
- Information security and data security
- IT challenges and the effectiveness of the company's security arrangements
- The client governance fora
- Internal audit annual assurance statement
- Significant challenges the business expects to face in the course of 2014/15 financial year

13.9 While significant challenges remain the trajectory for controls and improvements in systems is positive. While much needs to be done UK SBS Ltd have concluded that risks have generally been managed to an acceptable level.

13.10 I note the positive content of the UKSBS draft letter and welcome it as a source of assurance for this year and in future years. I would expect the improvement to continue.

UK SBS Ltd IT assurance

13.11 In 2013/14 AASG carried out Business Process Audits (BPA) and Controls Security Framework Audits (CSF) of UKSBS.

The CSF underpins the end to end processes and three key areas received limited assurance:

- Change control (limited assurance);
- Database security and control (limited assurance);
- Master data maintenance (limited assurance)

13.12 The assurance work has identified that the disaster recovery arrangements do not cover all information systems and the arrangements that are in place have not been tested.

13.13 I am concerned that the limited assurance provided by internal audit work with regard to some elements of the controls and security framework within UK SBS Ltd represents an area of risk for MRC which I am not able to directly manage. I rely on the Accounting Officer of UKSBS to provide me with an assurance on these areas.

Funding assurance activities

13.14 Funding assurance activities are now encompassed within the overall remit of AASG. These activities focus on substantive testing of the control environment [within individual research organisations] and its effectiveness in ensuring compliance with the research councils' terms and conditions which accompany grant funding. A further strand of work focuses on the scrutiny of the costing methodology used in research organisations, which for universities is the Transparent Approach to Costing (TRAC).

13.15 In 2013/14, 36 assurance assignments where undertaken, comprising of 15 visits and three enhanced desk based reviews and 18 desk based reviews. This programme is an important element of the risk management framework for MRC and findings for the year indicate that a satisfactory level of assurance can be reported based on the work undertaken.

14 Conclusion

14.1 This governance statement represents the results of the review of effectiveness of the governance framework, risk management and internal control. I have considered the evidence provided and the advice of AASG and the CARAC. The conclusion of the review is sufficient to satisfy me that the operation of systems of governance, risk management, and control are appropriate for the MRC and its risk profile.

Sir John Savill
Accounting Officer/Chief Executive

Medical Research Council
1 July 2014

The certificate 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 2014 under the Science and Technology Act 1965. The financial statements comprise: the Statements of Comprehensive Net Expenditure, Financial Position, Cash Flows, 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 Council and Chief Executive's Responsibilities, the Medical Research Council and the 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 and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by me in the course of performing the audit. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

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

Opinion on regularity

In my opinion, in all material respects the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements 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 affairs as at 31 March 2014 and of the 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 made 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 returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the part of the Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Report

I have no observations to make on these financial statements.

Sir Amyas C E Morse
Comptroller and Auditor General

Date: 3 July 2014

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

Statement of Comprehensive Net Expenditure

for the year ended 31 March 2014

	Note	2013/14 £000	2012/13 £000
Expenditure			
Staff costs	8a	143,097	155,501
Other expenditure	10	116,234	150,043
Research grants	11	272,501	243,118
Other research	12	164,236	91,484
Postgraduate/training awards	13	69,910	79,483
International subscriptions	14	17,678	17,847
Commercial activities	15	41,684	49,911
Amortisation of intangible assets	16	24,844	19,860
Depreciation	17	21,993	21,235
Impairment of property, plant and equipment	17	7,768	16,896
Reversal of prior year impairment of property, plant and equipment	17	(14,338)	0
Notional service charge	1p	6,113	0
Total expenditure		**871,720**	**845,378**
Income			
Contributions from other government departments	4	(20,182)	(36,596)
Contributions and grants from other bodies	5	(63,379)	(64,514)
Commercial activities	15	(85,416)	(91,720)
Other income	6	(3,482)	(3,616)
Total income		**(172,459)**	**(196,446)**
Net operating expenditure		**699,261**	**648,932**
Interest receivable	7	(38)	(32)
Other finance expenditure/(income)	9f	1,381	(16,695)
Unwinding of discount on provisions	24	98	119
Loss on disposal of property, plant and equipment		247	912
Share of losses of joint venture	18	0	2,394
Net expenditure for the year		**700,949**	**635,630**
Other comprehensive expenditure			
Net (gain) on revaluation of property, plant and equipment	17	(24,016)	(1,459)
Net loss on revaluation of intangible assets	16	5,674	41,311
Net (gain) on revaluation of investments	19	(667)	(1,333)
Actuarial (gain)loss on defined benefit pension plan	9b	(99,050)	61,822
Total comprehensive net expenditure for the year ended 31 March 2014		**582,890**	**735,971**

The notes on pages 87 to 124 form part of these accounts.

MRC Statement of Financial Position

as at 31 March 2014

	Note	2014 £000	2013 £000
Non-Current assets			
Intangible assets	16	50,536	81,043
Property, plant and equipment	17	492,099	516,799
Investment in joint ventures	18	231,047	116,543
Investments	19	3,346	2,679
Total Non-current assets		**777,028**	**717,064**
Non-current assets held for sale	**20**	**28,500**	**0**
Current assets			
Trade and other receivables	21	71,685	81,551
Cash and cash equivalents	22	10,566	57,989
Total current assets		**82,251**	**139,540**
Total assets		**887,779**	**856,604**
Trade and other payables	23	(244,198)	(263,792)
Provisions falling due within 1 year	24	(10,541)	(4,911)
Total current liabilities		**(254,739)**	**(268,703)**
Total assets less current liabilities		**633,040**	**587,901**
Non current liabilities			
Trade and other payables	23	(21,358)	(15,370)
Provisions for liabilities and charges	24	(5,007)	(11,342)
Pension (liability)/asset	9d	73,737	(34,027)
Total non current liabilities		**47,372**	**(60,739)**
Assets less liabilities		**680,412**	**527,162**
Equity			
Revaluation reserve		39,163	42,110
Intellectual property reserve		50,523	81,005
Pension reserve		73,737	(34,027)
General reserve		516,989	438,074
Total government funds		**680,412**	**527,162**

The notes on pages 87 to 124 form part of these accounts.

Sir John Savill
Accounting Officer/Chief Executive Officer, Medical Research Council
Date: 1 July 2014

MRC Statement of Cash Flows

for the year ended 31 March 2014

	Note	2014 £000	2013 £000
Cash flow from operating activities			
Net expenditure for the year	SoCNE	(700,949)	(635,630)
Depreciation charge	17	21,993	21,235
Amortisation charge	16	24,844	19,860
Capital grant of assets		29,170	0
Impairment of property, plant and equipment	17	7,768	16,896
Reversal of prior year impairments	17	(14,338)	0
Loss on disposal of property, plant and equipment		247	912
Impairment of investments	18	0	2,394
Other non-cash items – IAS 19 pension costs		(4,487)	(13,187)
Notional service charge	1p	6,113	0
(Decrease)/increase in provision for liabilities and charges	24	(705)	1,737
(Increase)/decrease in trade and other receivables	21	9,866	(17,760)
(Decrease) in trade and other payables	23	(13,606)	(5,507)
Net cash outflow from operating activities		**(634,084)**	**(609,050)**
Cash flow from investing activities			
Receipts from sale of property, plant and equipment		2,765	266
Receipts from sale of investments	18	0	10,318
Payments to acquire property, plant and equipment	17	(27,088)	(20,243)
Payments to acquire investments in joint ventures	18	(114,504)	(60,675)
Payments to acquire intangibles	16	(312)	(22)
Net cash outflow from investing activities		**(139,139)**	**(70,356)**
Net cash outflow before financing		**(773,223)**	**(679,406)**
Cash flows from financing activities			
Grant-in-aid received	3	725,500	655,900
Contribution for licence fees	3	300	300
Net cash inflow from financing activities		**725,800**	**656,200**
Net (decrease)/increase in cash and cash equivalents	22	**(47,423)**	**(23,206)**
Cash and cash equivalents at the beginning of the period	22	57,989	81,195
Cash and cash equivalents at the end of the period	22	10,566	57,989

The notes on pages 87 to 124 form part of these accounts.

MRC Statement of Changes in Taxpayers' Equity

for the year ended 31 March 2014

	Revaluation reserve	Intellectual Property reserve	Pension reserve	General reserve	Total Government funds
	£000	£000	£000	£000	£000
Balance at 1 April 2012	41,828	142,044	12,945	408,453	605,270
Grants from Parent (note 3)				655,900	655,900
Contribution for licence fees (note 3)				300	300
Net gain on revaluation of intangible assets		(41,311)			(41,311)
Net gain on revaluation of property, plant and equipment	1,459				1,459
Revaluation of investments	1,333				1,333
Actuarial loss in the pension scheme (note 9b)			(61,822)		(61,822)
Transfers between reserves	(2,510)	(19,728)	13,187	9,051	0
Contributions from other employers within the pension scheme			1,663		1,663
Net expenditure for the year				(635,630)	(635,630)
At 31 March 2013	**42,110**	**81,005**	**(34,027)**	**438,074**	**527,162**
Balance at 1 April 2013	42,110	81,005	(34,027)	438,074	527,162
Grants from parent (note 3)				725,500	725,500
Contribution for licence fees (note 3)				300	300
Net loss on revaluation of intangible assets		(5,674)			(5,674)
Net gain on revaluation of property, plant and equipment	24,016				24,016
Revaluation of investments	667				667
Actuarial gain(loss) in the pension scheme (note 9b)			99,050		99,050
Transfers between reserves	(27,630)	(24,808)	4,487	47,951	0
Contributions from other employers within the pension scheme			4,227		4,227
Notional service costs				6,113	6,113
Net expenditure for the year				(700,949)	(700,949)
At 31 March 2014	**39,163**	**50,523**	**73,737**	**516,989**	**680,412**

The notes on pages 87 to 124 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 2013/14 *Government Financial Reporting Manual* (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. Where the FReM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the MRC for the purpose of giving a true and fair view has been selected. The particular policies adopted by the MRC are described below. They have been applied consistently in dealing with items that are considered material to the accounts.

Adoption of new or revised standards effective and major FReM changes for 2013/14

All International Financial Reporting Standards, Interpretations and Amendments to published standards, effective at 31 March 2014, have been adopted in these financial statements, taking account the specific interpretations and adaptations included in the FReM.

IFRS 10 (Consolidated Financial Statements), 11 (Joint Arrangements), 12 (Disclosure of Interests in Other Entities), IAS 27 (Separate Financial Statements), IAS 28 (Investments in Associates and Joint Ventures) – (effective for periods beginning on or after 1 January 2013) – IASB have issued new and amended standards that affect the consolidation and reporting of subsidiaries, associates and joint ventures.

IFRS 13 – Fair Value Measurement – (effective for periods beginning on or after 1 January 2013) – IFRS 13 has been prepared to provide consistent guidance on fair value measurement for all relevant balances and transactions covered by IFRS (except where IFRS 13 explicitly states otherwise).

IAS 19 Employee Benefits – (effective for periods beginning on or after 1 January 2013) – revised requirements for pensions and other post retirement benefits, termination benefits and other changes.

IAS1 – Presentation of Financial Statements – (effective for periods beginning on or after 1 July 2012) – IAS1 has been amended to revise the way other comprehensive income is presented.

IAS16 – Property Plant and Equipment – (effective for periods beginning on or after 1 January 2013) – IAS16 has been amended with regard to the classification of servicing equipment. Spare parts, standby equipment and servicing equipment should be classified as property, plant and equipment when they meet the definition of property, plant and equipment in IAS16.

These disclosures have been adopted in full but have no impact within these financial statements due to the nature of the MRC's business.

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.

IFRS 9 Financial Instruments: Classification and Measurement (at its November 2013 meeting the IASB decided that the mandatory effective date for IFRS 9 will be no earlier than for periods beginning on or after 1 January 2017) – 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 with regard to how financial assets are measured and recorded. MRC will undertake an assessment of the impact of IFRS 9 once the full requirements are known.

IAS 19 – Employee Benefits – Amends the standard to clarify the requirements that relate to how contributions from employees or third parties that are linked to service should be attributed to periods of service.

IAS 32 – Financial Instruments: Presentation – Amendments to the offsetting of assets and liabilities

b. Accounting convention

These financial statements are prepared under the historical cost convention, modified by the revaluation of non-current assets, and, where material, current asset investments to fair value as determined by the relevant accounting standard. This is in accordance with the 2013-14 FReM issued by 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 MRC's functional currency and all amounts have been rounded to the nearest thousands.

c. Changes in accounting policy

There are no changes in accounting policy in the 2013/14 financial year.

d. Consolidation

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.

e. Investment in joint ventures

A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control.

The MRC has two joint venture investments: the Francis Crick Institute (CRICK); and Imanova Limited (Imanova).

Investments in Joint Venture are accounted for using the equity method, unless they are not yet fully operational, in which case they are valued at the cost to MRC of the development (as represented by assets under construction or the purchase of shares). This is deemed equivalent to fair value of the investment in the development phase. Impairment is considered at each year end, taking into account the ongoing service potential of the assets held.

Both CRICK and Imanova are accounted for at cost to MRC.

f. 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 of 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.

g. Property, plant and equipment and depreciation

Expenditure on property, plant and equipment includes the purchase of land, buildings and equipment costing £10,000 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 MRC's properties, most valuations are on a depreciated replacement cost basis. Any surplus on revaluation is taken to a revaluation reserve. Impairments in value are charged to the Statement of Consolidated Net Expenditure in the year in which they arise.

Assets under construction are valued at cost, including directly attributable in-house costs required to bring the asset into working condition for its intended use.

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

On disposal of a revalued asset, the resulting element of the revaluation reserve that is realised is transferred directly to the general reserve.

Provision is made for depreciation on all 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 lease)
Freehold buildings	Up to 60 years
Leasehold buildings	Up to 60 years (subject to length of lease)
Major facilities (items costing over £50,000)	11 years
Other scientific equipment	5 to 15 years
Computers	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.

h. Intangible assets and amortisation

The values of patents, licences and royalties held by the MRC 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 £10,000 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.

i. Impairment

The carrying amounts of the MRC'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. Non-current assets held for resale

Non-current assets held for sale are valued at the lower of carrying amount and fair value less costs to sell and are not depreciated.

Non-current assets are classified as held for sale if their carrying value will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable, the asset is available for immediate sale in its present condition, Management are committed to the sale and completion is expected within one year from the date of the classification.

k. Ownership of equipment purchased with MRC research grants

Equipment purchased by an institution with research grant funds supplied by the MRC belongs to the institution and is not included in MRC's property, plant and equipment. Through the Conditions of Grant applied to funded institutions, the MRC reserves the right to determine the disposal of such equipment and of the proceeds of any sale. Once the research has been completed the institution is free to use the equipment without reference to the Council.

l. Decommissioning costs

Decommissioning costs are recognised in full as soon as the obligation exists. When the obligation incurred gives access to future benefits a corresponding asset is set up in the Statement of Financial Position at the same time with depreciation being charged to the Statement of Comprehensive Net Expenditure over its useful economic life.

m. 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.

n. Income

MRC derives its income from a number of sources. These include income from Commercial Activities, contributions from other government bodies and contributions and grants from other bodies and other income. Commercial activities include royalties from licence agreements relating to intellectual property. It also receives income from government departments and other bodies which help co-fund research both of a collaborative and non-collaborative nature. Other income is derived from the sale of laboratory and library services, as well as proceeds from the sales of radio isotopes and other items. All income is shown net of trade discount, Value Added Tax and other taxes. Income is recognised in accordance with IAS 18. See note ab for details of deferred income.

o. Research and development

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

p. Notional service charge

The MRC receive support services from UK SBS Ltd, which is owned by Department for Business, Innovation and Skills. Rather than transact directly with UKSBS, the department has implemented a recharging solution whereby MRC administration grant levels are reduced, and the Department pays UK SBS on behalf of the council. For 2013-14 this charge was £6,113k (2012-13 £0k).

q. Cash and cash equivalents

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

r. 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.

s. Value added tax (VAT)

As the MRC 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.

t. Pension costs

Employer superannuation costs are based on an actuarially derived calculation under IAS 19. See note 9. 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 recognised in full as income or expense in the Comprehensive Statement of Net Expenditure.

The past service cost is recognised 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 recognised immediately.

The defined benefit liability is the aggregate of the present value of the defined benefit obligation and actuarial gains and losses not recognised reduced by past service cost not yet recognised 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 unrecognised 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.

u. 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 1.80 per cent (2012/13 2.35 per cent). The unwinding of the discount has been charged to the Statement of Comprehensive Net Expenditure.

v. 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.

w. Provisions

Provisions have been made in accordance with IAS 37 for early retirement and decommissioning costs. Provisions are recognised when it is probable that MRC 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 MRC 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).

x. Derivatives and other financial instruments

Due to the non-trading nature of its activities and the way in which the MRC is financed, the MRC 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 MRC 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 MRC 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 MRC 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.

y. Grants payable

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

Where the terms and conditions do not specify a pre-agreed payment profile or other matching considerations, obligations are recognised in full.

z. Employee benefits

Short term employee benefits are recognised by MRC when an employee has rendered service in exchange for those benefits. Included in the financial statements is an accrual for the outstanding unpaid and unused holiday entitlement at 31 March 2014 on a non-discounted basis.

aa. 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.

ab. 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 MRC receives funding for mainly collaborative projects to support the MRC'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. When there is both a) a condition which makes the grant repayable or returnable and b) a variance between the work done in the accounting period and received funding.

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 9 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-lifed and accounted for accordingly.

ac. Judgements made in the process of applying accounting policies

The MRC'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.

Provisions for liabilities and charges

Estimates are subject to uncertainty regarding timing or amounts of obligations (legal or constructive) due by the MRC. Significant judgements are made regarding probability and measurement of obligations. These include early retirement, disposal of (sealed) radioactive sources requiring the removal of radioactive substances by specialist suppliers, and dilapidations.

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. This includes assets of significant value brought into use for the first time. 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.

ad. Going concern

On 20 December 2010 David Willetts, Minister for Universities and Science, announced the MRC's financial allocations for 2011-12 through to 2014-15 as part of the Comprehensive Spending Review (CSR). On the basis of this statement, and subsequent discussions with BIS, MRC has no reason to believe that future funding will not be forthcoming. Therefore the accounts are produced on a going concern basis.

2. Segmental information

Analysis of MRC net expenditure by business segments

	Intramural	Extramural	Corporate	Technology Transfer	Total
	2013/14	2013/14	2013/14	2013/14	2013/14
	£000	£000	£000	£000	£000
Expenditure					
Staff costs	117,535	5,484	20,078	0	143,097
Other operating costs	93,719	3,775	18,740	0	116,234
Research grants	0	272,501	0	0	272,501
Other research	0	164,236	0	0	164,236
Postgraduate/training awards	7,029	62,881	0	0	69,910
International subscriptions	0	17,678	0	0	17,678
Commercial activities	0	0	0	41,684	41,684
Amortisation of intangible assets	34	0	0	24,810	24,844
Depreciation of property, plant and equipment	21,993	0	0	0	21,993
Impairment of property, plant and equipment	7,768	0	0	0	7,768
Reversal of prior year impairment	(14,338)	0	0	0	(14,338)
Notional service charge	0	0	6,113	0	6,113
Total operating expenditure	**233,740**	**526,555**	**44,931**	**66,494**	**871,720**
Income					
Contributions from other government departments	(3,853)	(16,329)	0	0	(20,182)
Contributions from other bodies	(39,829)	(23,550)	0	0	(63,379)
Commercial activities	0	0	0	(85,416)	(85,416)
Other income	(3,221)	(2)	(259)	0	(3,482)
Total operating income	**(46,903)**	**(39,881)**	**(259)**	**(85,416)**	**(172,459)**
Net operating expenditure	**186,837**	**486,674**	**44,672**	**(18,922)**	**699,261**

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.

It is not possible to identify how the MRC's assets and liabilities are shared across these operating segments in management information used by the Chief Executive and Senior Management and this information has not been disclosed.

	Intramural	Extramural	Corporate	Technology Transfer	Total
	2012/13	2012/13	2012/13	2012/13	2012/13
	£000	£000	£000	£000	£000
Expenditure					
Staff costs	134,196	3,379	17,926	0	155,501
Other operating costs	123,144	3,740	23,159	0	150,043
Research grants	0	243,118	0	0	243,118
Other research	0	91,484	0	0	91,484
Postgraduate/training awards	8,201	71,282	0	0	79,483
International subscriptions	0	17,847	0	0	17,847
Commercial activities	0	0	0	49,911	49,911
Amortisation of intangible assets	132	0	0	19,728	19,860
Depreciation of property, plant and equipment	21,235	0	0	0	21,235
Impairment of property, plant and equipment	16,896	0	0	0	16,896
Total operating expenditure	**303,804**	**430,850**	**41,085**	**69,639**	**845,378**
Income					
Release of deferred income	0	0	0	0	0
Contributions from other government departments	(6,689)	(29,907)	0	0	(36,596)
Contributions from other bodies	(38,755)	(25,801)	42	0	(64,514)
Commercial activities	0	0	0	(91,720)	(91,720)
Other income	(4,605)	13	976	0	(3,616)
Total operating income	**(50,049)**	**(55,695)**	**1,018**	**(91,720)**	**(196,446)**
Net operating expenditure	**253,755**	**375,155**	**42,103**	**(22,081)**	**648,932**

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 2013/14 (2012/13 £300,000). Grant-in-aid and animal licence fees received are treated as financing and credited directly to reserves.

	2013/14 £000	2012/13 £000
Grant allocation received and credited to general reserve	725,800	656,200

4. Contributions from other government departments

	2013/14 £000	2012/13 £000
Department of Health and NHS Executive	4,918	15,475
Department for International Development	12,672	17,902
Scottish Government Health Directorates	1,337	1,401
Other	1,255	1,818
Total	**20,182**	**36,596**

5. Contributions and grants from other bodies

	2013/14 £000	2012/13 £000 Restated
Other research councils	15,062	15,739
Charities	26,308	29,012
Collaboration with industry	1,848	1,081
European Commission	10,307	9,885
Health Authorities and NHS Trusts	323	975
Universities	8,110	6,362
Other	1,421	1,460
Total	**63,379**	**64,514**

The figures of £13k from Charities and £252k from Collaborations with Industry have been restated from Note 5 and included in Note 6 Other income

6. Other income

	2013/14 £000	2012/13 £000 Restated
Sales and other income	3,482	3,616

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

The figures of £13k from Charities and £252k from Collaborations with Industry have been restated from Note 5 and included in Note 6 Other income

7. Interest receivable

	2013/14 £000	2012/13 £000
Interest earned on the foreign currency accounts	13	19
Interest earned on the Sterling bank balances	25	13
Total	**38**	**32**

8. Staff numbers and related costs

a. Staff costs

	2013/14 £000	2012/13 £000
Salaries and wages	116,453	130,412
Social security costs	8,344	9,607
Other pension costs (note 9e)	21,868	19,475
Non-permanent staff	1,712	2,328
Council and committee honoraria	375	363
Early retirement costs	764	207
Gross staff costs	**149,516**	**162,392**
Less commercial activities (note 15)	(6,419)	(6,891)
Staff costs for general activities	**143,097**	**155,501**

b. Staff numbers

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

	2013/14	2012/13
Science	1,177	1,256
Research project support	653	728
Infrastructure and administration	374	437
Technical services	554	572
Locally employed staff (overseas)	1,343	1,274
Total	**4,101**	**4,267**

c. Reporting of Civil Service and other comprehensive schemes – exit packages

Exit packages cost band	Number of compulsory redundancies 2013/14(2012/13)	Number of departures agreed 2013/14(2012/13)	Total number of exit packages by cost band 2013/14(2012/13)
<£10k	6(9)	1(3)	7(12)
£10k-£25k	9(8)	8(6)	17(14)
£25k-£50k	10(8)	4(5)	14(13)
£50k-£100k	5(2)	11(2)	16(4)
£100k-£150k	0(0)	2(0)	2(0)
£150k-£200k	0(0)	0(0)	0(0)
>£200k	0(0)	0(0)	0(0)
Total number of exit packages	**30(27)**	**26(16)**	**56(43)**
Total resource cost (£000)	**£921(£596)**	**£1,192(£396)**	**£2,113(£992)**

9. MRC pension scheme

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 per cent and 6.5 per cent 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 £17m was paid into the MRCPS. £10m of which was in support of obligations under Section 75 (S.75)of the 1995 pensions Act in respect of liabilities of transferred employees; a separate section, the University section, has been set up within MRCPS to manage S.75 liabilities. £7m was paid to the main section to reflect the gradual increase in the underlying funding rate.

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 13 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 per cent funded on an ongoing basis. The present MRCPS employers' contribution rate remained at 13 per cent in 2013/14 (2012/13 – 13 per cent).

The valuation used for IAS 19 disclosures has been based on the data for the most recent actuarial valuations as at 31 December 2010, and updated to take account of the requirements of IAS 19 in order to assess the liabilities of the scheme at 31 March 2014. The mortality assumptions included within the figures are that male (female) members who retire at typical ages will live to approximately age 88 (90).

a. Financial assumptions used to calculate scheme liabilities

	2013/14 %	2012/13 %
Rate of increase on pensionable salaries	3.25	3.25
Rate of increase on pension payments	2.25	2.25
Discount rate	4.29	4.06
Inflation rate	2.25	2.25
Expected return on equities	4.29	4.06
Expected return on bonds	4.29	4.06
Expected return on overall fund	4.29	4.06

b. Analysis of actuarial gain

	2013/14 £000	2012/13 £000
Actual return less expected return on pension scheme assets	38,050	60,979
Experience gain/(loss) arising on the scheme liabilities	12,998	(17,215)
Changes in demographic assumptions	974	5,349
Changes in financial assumptions	47,028	(110,935)
Actuarial gain/(loss)	**99,050**	**(61,822)**

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

	2013/14 %	2012/13 %	2011/12 %	2010/11 %	2009/10 %
Actual return less expected return on pension scheme assets	3.51	6.06	-4.12	1.02	23.29
Experience (loss)/gain arising on the scheme liabilities	-1.29	1.65	0.33	-3.98	1.9
Actuarial gain/(loss)	9.81	-5.94	-6.81	-7.24	10.15

d. The assets and liabilities in the scheme

	2013/14 £000	2012/13 £000	2011/12 £000	2010/11 £000	2009/10 £000
Assets					
Equities and property	925,159	877,449	787,429	778,855	747,898
Bonds and cash	158,261	128,944	112,708	121,669	94,109
	1,083,420	**1,006,393**	**900,137**	**900,524**	**842,007**
Actuarial value of liability	(1,009,683)	(1,040,420)	(887,192)	(832,945)	(780,084)
Surplus/(Deficit) in scheme	**73,737**	**(34,027)**	**12,945**	**67,579**	**61,923**

e. The movements in the scheme surplus

	2013/14 £000	2012/13 £000
(Deficit)/surplus at the start of the year	**(34,027)**	**12,945**
Current service costs net of employee contributions (note 8a)	(21,868)	(19,475)
Employer contributions	31,963	17,630
Other finance (expenditure)/income (note 9f)	(1,381)	16,695
Actuarial gain/(loss) (note 9b)	99,050	(61,822)
(Deficit)/surplus at end of year	**73,737**	**(34,027)**

f. Other finance income

	2013/14 £000	2012/13 £000
Expected return on pension scheme assets	40,860	57,492
Interest on pension scheme liabilities	(42,241)	(40,797)
Net return – other finance (expenditure)/income (note 9e)	**(1,381)**	**16,695**

10. Other expenditure

	2013/14 £000	2012/13 £000
Rent and rates	4,973	5,094
Utilities	8,489	8,742
Maintenance and cleaning	13,047	16,476
Office supplies, printing and stationery	1,730	2,080
Laboratory supplies	28,922	36,322
Management consultancy and other professional fees	8,343	10,173
RCUK activities	2,010	10,458
Postage and telephone	2,213	2,161
Audit fee	175	185
Travel, subsistence and hospitality	6,835	7,723
Computing	5,244	7,143
Equipment servicing	4,991	5,833
Minor equipment	5,858	11,087
Miscellaneous	12,457	14,681
Transport costs	1,189	640
Exchange rate losses/(gains)	1,655	491
Field work – clinical services	4,116	4,647
Biomedical services and licence fees	2,088	3,278
Decommissioning costs	1,899	2,829
Total	**116,234**	**150,043**

11. Research grants

	2013/14 £000	2012/13 £000
Research grants	192,992	158,635
Programme grants	41,098	41,594
Centre grants	15,212	16,050
Trial grant	15,518	17,098
New investigator research grant	7,040	9,147
Other	641	594
Total	**272,501**	**243,118**

12. Other research

	2013/14 £000	2012/13 £000
International Health Research Resource	9,288	30,172
University units	104,437	25,963
Phenome Centre	0	6,875
European and Developing Countries – Clinical Trials Partnership	0	14,000
Translational imaging capacity	7,200	863
Translational Research	14,634	0
Transfer of Biomedical Science Programmes to University Partners	7,152	0
High Throughput Omic Science and Imaging	6,420	0
Open Access Block Grants	3,374	0
Stem Cell – Human Pluripotent	0	1,500
Respiratory Health – common and rare genetic variants	0	3,245
Neurodegenerative diseases initiative	1,053	738
Other	10,678	8,128
Total	**164,236**	**91,484**

13. Postgraduate/training awards

	2013/14 £000	2012/13 £000
Research studentships/advanced course studentships	29,814	35,123
Post-doctoral fellowships	40,096	44,360
Total	**69,910**	**79,483**

14. International subscriptions

	2013/14 £000	2012/13 £000
International Agency for Research on Cancer	902	892
European Molecular Biology Conference	2,126	2,261
European Molecular Biology Laboratory	13,341	13,524
Human Frontier Science Program	1,070	1,035
European Science Foundation	89	114
Sciences Europe	113	21
European Molecular Biology Organisation	37	0
Total	**17,678**	**17,847**

15. Commercial activities

	2013/14 £000	2012/13 £000
Income during the year	**85,416**	**91,720**
Expenditure during the year:		
Staff costs (note 8a)	(6,419)	(6,891)
Other expenditure	(35,265)	(43,020)
Total expenditure	**(41,684)**	**(49,911)**
Net income for the year	**43,732**	**41,809**

The council 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 council 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 balance sheet.

16 Intangible assets

MRC	Patents & Licences £000	Software Licences £000	Total £000
At cost or valuation			
At 1 April 2013	221,703	2,220	223,923
Additions	0	312	312
Disposals	0	(441)	(441)
Transfer	0	(287)	(287)
Revaluation	(5,674)	0	(5,674)
At 31 March 2014	**216,029**	**1,804**	**217,833**
Amortisation			
At 1 April 2013	(140,698)	(2,182)	(142,880)
Charge for the year	(24,809)	(35)	(24,844)
Disposals	0	427	427
At 31 March 2014	**(165,507)**	**(1,790)**	**(167,297)**
Net Book Value			
At 31 March 2014	**50,522**	**14**	**50,536**
At 1 April 2013	81,005	38	81,043

MRC	Patents & Licences £000	Software Licences £000	Total £000
At cost or valuation			
At 1 April 2012	263,014	2,348	265,362
Additions	0	22	22
Disposals	0	(150)	(150)
Revaluation	(41,311)	0	(41,311)
At 31 March 2013	**221,703**	**2,220**	**223,923**
Amortisation			
At 1 April 2012	(120,970)	(2,200)	(123,170)
Charge for the year	(19,728)	(132)	(19,860)
Disposals	0	150	150
At 31 March 2013	**(140,698)**	**(2,182)**	**(142,880)**
Net Book Value			
At 31 March 2013	**81,005**	**38**	**81,043**
At 1 April 2012	142,044	148	142,192

17. Property plant & equipment

MRC	Land and Buildings (1) £000	Assets under Construction £000	Equipment and Vehicles £000	Total £000
Cost or valuation				
At 1 April 2013	**624,758**	**15,985**	**230,411**	**871,154**
Additions	7,966	5,219	13,903	27,088
Disposals	(88,476)	0	(49,408)	(137,884)
Transfers	(27,852)	(1,302)	941	(28,213)
Revaluation	32,354	0	3,513	35,867
Impairment	(7,768)	0	0	(7,768)
Reversal of prior year impairment	14,338	0	0	14,338
At 31 March 2014	**555,320**	**19,902**	**199,360**	**774,582**
Depreciation				
At 1 April 2013	**(203,041)**	**0**	**(151,314)**	**(354,355)**
Charge in year	(7,176)	0	(14,817)	(21,993)
Disposals	68,200	0	37,519	105,719
Revaluation	(9,769)	0	(2,085)	(11,854)
At 31 March 2014	**(151,786)**	**0**	**(130,697)**	**(282,483)**
Net book value				
At 31 March 2014	**403,534**	**19,902**	**68,663**	**492,099**
At 1 April 2013	421,717	15,985	79,097	516,799

The net book value of land and buildings comprises:

	2014 £000	2013 £000
Freehold	80,543	99,796
Long leasehold	316,945	316,506
Short leasehold	6,046	5,365

(1) Property, plant and equipment include £58,645,070 (2013 – £85,874,317) in respect of freehold land which is not depreciated.

National Temperance Hospital Site. The site has been actively marketed by MRC and a sale is expected within the next twelve months and so has been classified as an Asset held for sale (see Note 20). The latest valuation of the site is £28.5m (2013 - £28.5m)

The professional revaluation for the research unit in Uganda planned for 2012/13 was not completed. The last valuation that the MRC have for Uganda building assets was dated November 2011. This valuation gives a calculated impairment of £165k, which is not considered to be material to the MRC. Accordingly, no adjustment has been made for this valuation.

A professional revaluation of land and buildings was undertaken as at 1 December 2013 by Powis Hughes and Associates, Chartered Surveyors, an independent valuer. Land and buildings were valued in accordance with the Royal Institute of Chartered Surveyors Valuation Standards (8th Edition), the "Red Book" and are prepared either on a Market Evidence or a Depreciated Replacement Cost basis.

MRC	Land and Buildings) £000	Assets under Construction £000	Equipment and Vehicles £000	Total £000
Cost or valuation				
At 1 April 2012	**383,093**	**274,438**	**223,216**	**880,747**
Additions	575	5,915	13,753	20,243
Disposals	(1,559)	0	(12,298)	(13,857)
Transfers	263,653	(264,368)	715	0
Revaluation	(4,108)	0	5,025	917
Impairment	(16,896)	0	0	(16,896)
At 31 March 2013	**624,758**	**15,985**	**230,411**	**871,154**
Depreciation				
At 1 April 2012	**(201,584)**	**0**	**(144,757)**	**(346,341)**
Charge in year	(6,576)	0	(14,659)	(21,235)
Disposals	1,478	0	11,199	12,677
Revaluation	3,641	0	(3,097)	544
Impairment	0	0	0	0
At 31 March 2013	**(203,041)**	**0**	**(151,314)**	**(354,355)**
Net book value				
At 31 March 2013	**421,717**	**15,985**	**79,097**	**516,799**
At 1 April 2012	181,509	274,438	78,459	534,406

The net book value of land and buildings comprises:

	2013 £000	2012 £000
Freehold	99,796	52,370
Long leasehold	316,506	124,768
Short leasehold	5,365	4,371

18. Investments in joint ventures

	Joint venture Francis Crick Institute Ltd £000	Joint venture UK SBS Ltd £000	Joint venture Imanova Ltd £000	Total of Joint ventures £000
As at 1 April 2013	115,418	0	1,125	116,543
Additions	114,379	0	125	114,504
Share of losses during the year	0	0	0	0
Revaluation	0	0	0	0
As at 31 March 2014	**229,797**	**0**	**1,250**	**231,047**
As at 1 April 2012	55,118	12,712	750	68,580
Additions	60,300	0	375	60,675
Share of losses during the year	0	(2,394)	0	(2,394)
Disposals	0	(10,318)	0	(10,318)
Revaluation	0	0	0	0
As at 31 March 2013	**115,418**	**0**	**1,125**	**116,543**

The Francis Crick Institute Limited (SPV) and UKCMRI Construction Limited (Conco)

The Francis Crick Institute is a UK registered charity and limited company formed to deliver the proposed UK Centre for Medical Research and Innovation. The MRC, in partnership with Cancer Research UK, University College London, Kings College London, Imperial College of Science Technology and Medicine and the Wellcome Trust, own the Francis Crick Institute Ltd. The entity is designed to allow the delivery of the scientific aims of the joint venture. The original Joint Venture Agreement was signed on 9th November 2010 which established the Francis Crick Institute as a charity limited by shares, following agreement of the Charity Commission. A deed of accession varying the original Joint Venture Agreement was signed by all venturers on 11 October 2011.

Until such time as the institute becomes operational the Council believe that their investment is best represented by the cost of the shares and therefore we have not consolidated the results of the Francis Crick Institute Ltd.

Shares in UKCMRI Construction Limited the construction company owned by the original partners, of which each partner held one £1 share, were transferred to the Francis Crick Institute Ltd as part of the JVA and became a wholly owned subsidiary of the Francis Crick Institute Ltd. The funding of the project has been by capital contributions leading to shares. The MRC investment in the Francis Crick Institute Ltd is represented by issued shares.

Shares are issued in respect of payments and these are accounted for as investments. In return for providing the Francis Crick Institute with in year funding under the joint venture agreement of £114.4m. The Francis Crick Institute agreed to issue the Council ordinary shares in the Francis Crick Institute to the same value. In addition at the year end the Francis Crick Institute owed the Council £116,349 (2012-13 £110,681) and the Council owed the Francis Crick Institute £1,525,648 (2012-13 £1,434,041).

A lease was made between the original founders and the Francis Crick Institute Ltd on 7th June 2012 granting lease of land at Brill Place, Camden, London (site of the Francis Crick Institute) to the Francis Crick Institute Ltd. The lease term is for a period of 55 years at peppercorn rent. The land had already been revalued by Powis Hughes, Chartered Surveyors on 14th April 2011. The valuation was carried out in accordance with RICS Valuation Manual, as amended April 2010, known as the revised "Red Book", at Market Value. The MRC's interest in the land was valued at £49,500,000 and reflected in the financial statements accordingly, (2012/13 – £49,500,000).

Imanova Limited

The Molecular and Translational Imaging centre (to be known as Imanova) is an innovative alliance (joint venture) between the MRC, Imperial College of Science Technology, Kings College London and University College. Established in April 2011, Imanova and its partners bring together a breadth and depth of knowledge and expertise that will drive research and innovation in imaging sciences. The company will create, manage and operate a new centre of excellence in the field of translational imaging research. The company is a not for profit entity, of which the MRC owns 25% shareholding.

During the year, an award of £7.2m was made to Imanova (2012/13 £0) in conjunction with JVA initial funding obligations. In 2012/13, separate from the JVA, an award for £845,000 was made in respect of work to be undertaken by Imperial College through Imanova. No separate award was made in 2013/14.

MRC has accounted for its investment in Imanova as a joint venture, with its valuation based on its service potential. It holds 25% of the ordinary shares of the company whose provisional results for financial year 2013/14 record a deficit of £0.95m (2012/13 £1.13m) before tax and net assets of £2.47m (2012/13 £2.73m). During the year MRC had transactions totalling £ 4.7m (2012/13 £5.1m) with Imanova. There were no outstanding balances owed from Imanova Limited to MRC and MRC to Imanova Limited at the end of the year.

19. Investments

a. Quoted investments

	2014 £000	2013 £000
As at 1 April	2,679	1,346
Additions	0	0
Share of losses during the year	0	0
Revaluation	667	1,333
As at 31 March	**3,346**	**2,679**

	Number of shares held	Holding %	Market value at 31 March 2014 £000
Quoted			
Galapagos NV (Belgium)	59,919	0.47	792
Vectura (formerly Innovata plc)	58,357	0.04	89
Natus Medical Inc (USA)	7,066	0.04	110
Sangamo Biosciences Inc (USA)	165,255	0.54	1,795
Topo Targets A/S (Denmark)	113,916	0.28	41
Vernalis plc	15,519	0.14	6
Avacta Group plc	44,601,073	0.46	513
Total			**3,346**

At the close of business on 31 March 2014 the price per share of council's shareholdings listed on the London stock exchange, the AIM, the Nasdaq and the Danish Stock Exchange were as follows:

Galapogos NV	€ 15.99
Vectura (formerly Innovata plc)	153.25p
Natus Medical Inc	$25.80
Sangamo Biosciences Inc	$18.08
Topo Targets A/S	DKK 3.25
Vernalis plc	35.75p
Avacta Group plc	1.15p

b. Unquoted investments

Private unquoted	Number of shares held
Anaptys Biosciences Inc.	120,000
CMP Therapeutics Ltd	93,600
Bicycle Therapeutics Ltd	72,059
D-Gen Ltd	21,412
Iclectus Ltd	6,400
Oxxon Therapeutics Ltd	10,332
Rain Dance Technologies Inc	200,000
Senexis Ltd	10
Heptares Therapeutics Limited	625,077
Phosphate Therapeutics Ltd	245,871
UKSBS Ltd A Shares (note 18)	1
Francis Crick Institute Limited (note 18)	229,797,391
Imanova Limited	1,250

These companies with the exception of SBS and Francis Crick Institute represent the council's interest in enterprises engaged in the commercial development of council inventions and know how. These equity positions were received in return for company access to the council's intellectual property.

c. Companies limited by guarantee

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 MRC 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 council. As the council is one of nine trustees that manage Biobank and it is a charity, the council 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 council to UK Biobank Limited during 2013/14 were £4,240,030 (2012/13 = £6,519,210). Additional investments were made during the year towards biomarker assays, imaging and genetic analysis initiatives totalling £ 5.0m. (2012/13 £23.6m).There were no outstanding balances to / from UK Biobank Limited at the end of the year, or the prior year.

Medical Research Council Technology Limited

Medical Research Council Technology Limited (MRCT) is a company limited by guarantee and a registered charity. Its principal activity is the management, development and exploitation of the Council's intellectual property assets, including its valuable patent rights associated with the production of monoclonal antibodies.

Following reorganisation of MRCT's governance arrangements, the 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. MRCT is a related party of the council.

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: Management fees of £4,620,000 (2012/13 – £4,200,000). At the year end, £8,000,000 (2013 – £8,329) was due from the MRC to MRCT and £33,229 (2013 – £209,000) was due to the MRC from MRCT.

20. Non-current assets held for sale

	2014 £000	2013 £000
Assets held for resale	28,500	0

The site of the former National Temperance Hospital is categorised as held for sale as it is expected to be sold to the Department for Transport within the next three months.

The asset will be sold for the valuation it is held at in the Statement of Financial Position at the year-end of £28.5m. Therefore there will be no gain or loss on disposal of this asset.

21. Trade and other receivables

	2014 £000	2013 £000
Trade receivables	18,577	24,378
Less provisions for bad debts	(16)	(16)
	18,561	24,362
Other receivables	1,763	2,749
Accrued income	37,962	39,553
Prepayments	13,399	14,887
Total	**71,685**	**81,551**

Intra-government balances

At the end of the year, the council had receivable balances with other government bodies totalling

£8,061k (2012/13 = £6,268k) comprising the following: Government Agencies £8,009k (2012/13 = £6,169k), NHS Trusts and Hospitals £52k (2012/13 = £99k).

22. Cash and cash equivalents

	2014 £000	2013 £000
Balance at 1 April	57,989	81,195
Net change in cash and cash equivalent balances	(47,423)	(23,206)
Balance at 31 March	10,566	57,989
The following balances were held at commercial banks and cash in hand	2,678	2,900
The following balances were held with the Government Banking Service	7,888	55,089
Balance at 31 March	**10,566**	**57,989**

23. Trade and other payables

	2014 £000	2013 £000
Due within 1 year		
Trade payables	(82,708)	(81,110)
Accruals	(140,358)	(150,313)
Taxation and social security	(2,261)	(2,819)
Deferred income	(17,215)	(28,471)
Other payables	(1,656)	(1,079)
Total	**(244,198)**	**(263,792)**
Due after more than 1 year		
Accruals	**(21,358)**	**(15,370)**

Intra-government balances

At the end of the period, the MRC had payable balances with other government bodies totalling £3,302k (2012/13 = £4,424k) comprising the following: Government Agencies £3,034k (2012/13 = £3,749k) NHS Trusts and Hospitals £268k (2012/13 = £675k).

24. Provisions for liabilities and charges

	Early retirements compensation scheme(1) £000	Decommissioning costs £000	Other costs £000	Total provisions £000
At 1 April 2013	4,149	10,377	1,727	16,253
Amount provided in year	764	1,305	0	2,069
Unwinding of the discount	98	0	0	98
Amount expended in year	(913)	(1,959)	0	(2,872)
At 31 March 2014	**4,098**	**9,723**	**1,727**	**15,548**
Provisions due within 1 year	765	8,049	1,727	10,541
Provisions due between 1 and 5 years	1,761	1,674	0	3,435
Provisions due between 6 and 10 years	930	0	0	930
Provisions due over 10 years	642	0	0	642
Sub-total of provisions over one year	3,333	1,674	0	5,007
At 31 March 2014	**4,098**	**9,723**	**1,727**	**15,548**

At 1 April 2012	4,919	9,597	0	14,516
Amount provided in year	207	780	1,727	2,714
Unwinding of the discount	119	0	0	119
Amount expended in year	(1,096)	0	0	(1,096)
At 31 March 2013	**4,149**	**10,377**	**1,727**	**16,253**
Provisions due within 1 year	884	2,300	1,727	4,911
Provisions due between 1 and 5 years	1,999	8,077	0	10,076
Provisions due between 6 and 10 years	886	0	0	886
Provisions due over 10 years	380	0	0	380
Sub-total of provisions over one year	3,265	8,077	0	11,342
At 31 March 2013	**4,149**	**10,377**	**1,727**	**16,253**

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.

Decommissioning

These include provisions for the disposal of the Cyclotron at CSC Hammersmith, £9,285,000 (2012/13 £9,839,000) and High Activity Sealed Sources being used in some units, £438,000 (2012/13 = £538,000)

Other

These relate to the dilapidation costs for the old LMB buildings that were vacated as part of the switch to the new LMB facility.

25. Commitments under leases

Operating leases

Total future minimum lease payments under operating leases are given in the table below for each of the following periods.

	2013/14 £000	2012/13 £000
Obligations under operating leases for the following periods comprise:		
Other:		
Not later than one year	15,684	15,684
Later than one year but not later than five years	16,906	32,590
Later than five years	0	0
Total	**32,590**	**48,274**

26. Contingent liabilities

Contingent liabilities of £2.5m have been identified in relation to dilapidation works, which may be required at the end of the property leases expected to end within the next ten years. These are sites located at Head Office London, Centre for Protein Engineering Cambridge and Human Nutritional Research Unit Cambridge.

27. Commitments

Capital

The council had estimated future commitments to capital expenditure, which had been contracted but not provided for at the balance sheet date of £42,972,857 (2012/13 =£164,352,600) comprising the following: Francis Crick Institute £39,322,857 and 950MHz NMR Spectrometer £3,650,000.

Research awards

Forward commitments on research awards:	£000
2014 – 2015	365,541
2015 – 2016	247,249
2016 – 2017	156,615
2017 – 2022	114,113

28. 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 council 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, the Technology Strategy Board and the UK SBS Ltd.

The council 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. Two of the Trustees who manage the charities are nominated by the Council.

During the year, the following material transactions with the council, board and committee members took place in respect of awards funded by the council.

Table 1

The table below lists council, board or committee members who are classified as either a principal investigator or a co-investigator against an award made in the 2013/14 financial year. The value shown is the whole life commitment of the award, if an award is made to more than one related party the value is counted more than once.

Name	Number of awards	Value (£)
Professor S. Faisal Ahmed	1	£ 1,018,439
Professor Robin Ali	2	£ 2,996,835
Professor Enrique Amaya	1	£ 835,241
Professor Peter Walter Andrews	1	£ 3,090,296
Professor Andrew Baker	1	£ 357,422
Professor David Beech	1	£ 748,555
Professor Martin Birchall	1	£ 284,693
Professor Doreen Cantrell	1	£ 456,646
Professor Philip Cowen	1	£ 897,300
Dr Trevor Cox	1	£ 334,170
Professor Helen Curran	1	£ 604,099
Professor John Danesh	1	£ 2,017,847
Professor Ian Deary	2	£ 7,526,625
Professor David Dockrell	1	£ 508,081
Professor Cam Donaldson	1	£ 1,927,517
Professor Tariq Enver	1	£ 1,588,390
Professor Stuart Forbes	2	£ 6,717,020
Professor Gad Frankel	1	£ 480,115
Professor Robin Franklin	1	£ 3,090,296
Professor Anthony Gershlick	1	£ 460,239
Dr Paramjit Gill	1	£ 101,507
Professor Neil Hanley	1	£ 672,015
Professor Sian Harding	2	£ 3,036,811
Professor Stephen Hill	1	£ 518,527
Professor Jonathan Hill	1	£ 1,881,171
Professor Anthony Hollander	1	£ 2,770,000
Professor John Isaacs	2	£ 1,300,821
Professor David Jackson	1	£ 592,796
Professor Shitij Kapur	2	£ 4,705,687
Professor Frank Kelly	2	£ 6,739,727
Professor David Lomas	1	£ 8,875,956

Name	Number of awards	Value (£)
Professor Thomas MacDonald	1	£ 371,619
Professor Paolo Madeddu	1	£ 2,770,000
Dr Adrian Mander	1	£ 3,381,061
Professor Mark McCarthy	1	£ 2,469,271
Professor Sheila MacNeil	1	£ 730,762
Professor Susan Michie	1	£ 471,607
Professor Michael O'Donovan	1	£ 4,012,041
Professor Lucilla Poston	1	£ 842,146
Professor David Ray	2	£ 1,292,458
Professor Adriano Rossi	1	£ 125,788
Professor Guy Rutter	2	£ 4,329,295
Professor Ian Sabroe	1	£ 508,081
Professor Philippa Saunders	1	£ 125,788
Professor Pamela Shaw	1	£ 806,104
Professor Kenneth Smith	1	£ 1,913,758
Dr Andrew Ward	1	£ 527,094
Dr Christopher Weir	1	£ 815,504
Professor David Westhead	1	£ 5,781,754
Professor Gavin Wilkinson	1	£ 543,541
Professor Paula Williamson	1	£ 3,381,061
Dr Jason Wolf	1	£ 527,094
Professor Matthew Wood	1	£ 1,008,202

Table 2

The table below lists council, board or committee members who are registered at an Organisation that has received funding in the 2013/14 financial year.

Research Organisation	Number of Awards	Amount Awarded
Babraham Institute	**3**	**£1,769,451**
Martin Turner		
Cardiff University	**10**	**£17,718,142**
Gavin Wilkinson		
Kim Graham		
Michael O'Donovan		
Valerie O'Donnell		
Glasgow Caledonian University	**1**	**£1,927,517**
Cam Donaldson		
Imperial College London	**25**	**£36,692,983**
Anne Lingford-Hughes		
Azra Ghani		
Charles Bangham		

Research Organisation	Number of Awards	Amount Awarded
Imperial College London (continued)		
Dorian Haskard		
Gad Frankel		
Guy Rutter		
Jonathan Weber		
Martin Wilkins		
Nicholas Grassly		
Paul Freemont		
Sian Harding		
William Wisden		
Keele University	**1**	**£268,069**
Alicia El Haj		
King's College London	**41**	**£27,207,444**
Anand Purushotham		
Anne Ridley		
Frank Kelly		
Jane Sandall		
Joseph Hajnal		
Lucilla Poston		
Martin Gulliford		
Paul Sharpe		
Shitij Kapur		
Lancaster University	**1**	**£395,050**
Bruce Hollingsworth		
Peter Diggle		
Liverpool School of Tropical Medicine	**6**	**£2,808,153**
David Lalloo		
Hilary Ranson		
London Sch of Hygiene and Trop Medicine	**14**	**£6,628,289**
Judith Green		
Laura Rodrigues		
Michael Kenward		
Neil Pearce		
Richard John Hayes		
Steven Cummins		
Newcastle University	**8**	**£8,304,792**
Alexander Thiele		
Andrew Hall		
Caroline Austin		

Research Organisation	Number of Awards	Amount Awarded
Newcastle University (continued)		
Hamish McAllister-Williams		
Herbie Newell		
John Isaacs		
John Lunec		
Patrick Chinnery		
Tim Cawston		
Queen Mary, University of London	**6**	**£4,146,231**
Frances Balkwill		
Thomas MacDonald		
Queen's University of Belfast	**2**	**£827,089**
Frank Kee		
The University of Manchester	**24**	**£19,101,912**
David Ray		
Enrique Amaya		
Gordon Jayson		
Jonathan Hill		
Matthew Lambon Ralph		
Michael White		
Neil Hanley		
Rayaz Malik		
Robert Hawkins		
Stuart Pickering-Brown		
Wael El-Deredy		
Yanick Crow		
University College London	**39**	**£44,315,075**
Andrew Copp		
Aroon Hingorani		
Caroline Sabin		
Deenan Pillay		
Eileen Joyce		
Helen Curran		
Jugnoo Rahi		
Martin Birchall		
Mary Collins		
Pam Sonnenberg		
Patricia Salinas		
Peter Taylor		
Robin Ali		
Susan Michie		
Tariq Enver		

Research Organisation	Number of Awards	Amount Awarded
University of Aberdeen	**6**	**£3,173,518**
Gordon Brown		
Mandy Ryan		
Michael Frenneaux		
Sara MacLennan		
University of Bath	**4**	**£2,088,541**
Andrew Ward		
Jason Wolf		
Stephen Ward		
University of Birmingham	**6**	**£2,959,241**
David Simmons		
Jane McKeating		
Keith Wheatley		
Paramjit Gill		
Weibke Arlt		
University of Bristol	**12**	**£5,075,706**
Alastair Poole		
Anthony Hollander		
Jonathan Sterne		
Paolo Madeddu		
Timothy James Peters		
University of Cambridge	**27**	**£22,869,460**
Colin Taylor		
David Lomas		
Helen Lee		
James Rowe		
John Danesh		
Kenneth Smith		
Nicholas Morrell		
Philip Jones		
Robin Franklin		
Sharon Peacock		
University of Dundee	**4**	**£2,729,134**
David Gray		
Doreen Cantrell		
Kate Storey		
Rory McCrimmon		
Tracy Palmer		

Research Organisation	Number of Awards	Amount Awarded
University of Edinburgh	**16**	**£15,212,518**
Adriano Rossi		
Christopher Weir		
Giles Hardingham		
Ian Deary		
Judith Allen		
Malcolm Dunlop		
Philippa Saunders		
Sarah Cunningham-Burley		
Siddharthan Chandran		
Stuart Forbes		
University of Glasgow	**11**	**£5,602,549**
Andrew Baker		
Jeremy Mottram		
Margaret MacLean		
Robert Insall		
Syed Faisal Ahmed		
University of Leeds	**6**	**£8,437,406**
David Beech		
David Westhead		
Sheena Radford		
University of Leicester	**8**	**£4,262,118**
Anthony Gershlick		
Christopher Brightling		
Giovanna Mallucci		
Nilesh Samani		
University of Liverpool	**5**	**£3,496,036**
Ian Greer		
Malcolm Jackson		
Paula Williamson		
Trevor Cox		
University of Nottingham	**5**	**£2,652,382**
Ian Hall		
John Atherton		
Peter Fischer		
Stephen Coombes		
Stephen Hill		

Research Organisation	Number of Awards	Amount Awarded
University of Oxford	**42**	**£44,354,631**
Christopher Holmes		
David Jackson		
Ian Tomlinson		
Irene Tracey		
J. Paul Bolam		
Mark McCarthy		
Matthew Wood		
Paul Brennan		
Paul Riley		
Philip Cowen		
University of Plymouth	**1**	**£513,055**
John Zajicek		
University of Sheffield	**7**	**£3,000,758**
Alicia O'Cathain		
David Dockrell		
Ian Sabroe		
Mimoun Azzouz		
Moira Whyte		
Pamela Shaw		
Peter Walter Andrews		
Sheila MacNeil		
Stephen Walters		
University of Southampton	**5**	**£1,337,692**
Diana Eccles		
Hazel Inskip		
Hugh Perry		
University of Warwick	**2**	**£8,457,142**
Christopher Dowson		
Nigel Stallard		
Simon Gates		
University of York	**2**	**£895,489**
Mark Sculpher		
Paul Kaye		

29. 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 council 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 council'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 council is therefore not exposed to significant liquidity risks.

Interest rate risk

The council 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 the Government Banking Systems 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 council 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 council also holds certain balances in overseas bank accounts to help manage day-to-day business transactions of its overseas operations. During the year end, the average monthly float levels were £1,135,000 (2012/13 = £898,333).

Foreign currency balances

Amount	As at 31 March 2014	As at 31 March 2013
USD	£533,471	£1,915,298
Euro	£2,143,491	£2,587,677

A 5 per cent (10 per cent) ± movement in exchange rates would equate to £133,848, (£267,696), such events would have minimal impact on council's resources. In 2012/13 the corresponding amounts were £225,149 (£450,298).

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 council's financial assets and liabilities are equivalent to the carrying amount unless stated above. The council 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 council in undertaking its activities. Of current outstanding trade debt 22 per cent is greater than 30 days old (2012/13: 20 per cent).

30. Thefts, Losses and Special Payments

During the year the MRC incurred total losses of £357,251:

- A loss of £7,553 resulting from fraudulent activity (one case).
- Thefts of computer equipment, mobile devices and peripherals (fifteen cases) estimated at £9,810 in total.
- Losses of accountable stores (two cases), leading to a constructive loss of £339,908 relating to expired and discontinued stock.

There were no special payments made in the year.

31. Events after the reporting period

IAS 10 events after the balance sheet 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 3 July 2014. The financial statements do not reflect events after this date.

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