Outputs, outcomes and impact of MRC research: 2013/14 report

SECTION 2.5: Awards and recognition
Awards and recognition

The MRC values the ‘measures of esteem’ afforded to our researchers. Awards, prizes and other forms of acknowledgement are a worthy recognition of the quality of research undertaken by MRC scientists. Certain measures, such as being appointed to the editorial board of a journal or attracting visiting staff, can also be seen to have a wider impact on the research and teaching community. Measures of esteem are used internationally by some funders alongside citation analysis, peer review and research income as indicators of research quality.

The MRC seeks details of the prizes, awards and other types of recognition received by MRC researchers in order to better understand the ways in which researchers are recognised for their contributions to academia and the wider society.

It is quite clear that MRC researchers often work hard to enhance the science base and wider society far beyond pursuing their specific funded research interests. We cannot do justice in this chapter to the varied and important ways in which MRC researchers are quite properly recognised for this work.

A small selection of the ways in which our scientists have reported being recognised can be found throughout this chapter of the report, characterised by the following:

- Appointed to the editorial board of a journal or book series
- Membership of learned societies
- Attracted visiting staff or internships to laboratory
- Research prizes
- 2013 Orders of Chivalry

Appointed to the editorial board of a journal or book series

An engaged and expert editorial board is essential to the success of peer-reviewed journals. Rost and Frey consider membership of the academic editorial board of a professional journal to be an integral indicator of research quality as it demonstrates a scholar’s reputation and recognition among peers. It recognises their contributions to the research community in terms of reading and reviewing the work of others.

Researchers primarily reported appointments to the editorial boards of journals, including renowned publications such as Science, Cell and Nature, and a small number gave details of editing or producing content for a book. Such recognition yielded significant impact for researchers. This included:

- An increase in international profile for them and their research group.
- A subsequent increase in opportunities for international collaborations and networking.
- Being able to influence the strategic direction and scientific priorities of the journal in question.
- Increasing the awareness of a particular scientific field by helping to disseminate the outputs of a particular study.
- Researchers also reported that this type of recognition enabled them to develop a greater awareness of the publication process and enhanced knowledge of the area of research in other regions of the world.

Professor Neil Ferguson at Imperial College London was a founding editor of PLOS Current Outbreaks, an Open Access publication channel for the rapid communication of new research in all aspects of infectious disease outbreaks.

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Professor Ian Young at Queen’s University of Belfast was appointed as a guest editor of the special issue of Systematic Reviews in 2013 to celebrate the 20th anniversary of The Cochrane Collaboration.

Dr Stephen Chapman at the University of Oxford was appointed, in 2013, joint editor-in-chief of new journal BMJ Open Respiratory Research, an online, open access, international respiratory medicine journal published by the BMJ in partnership with the British Thoracic Society.

Dr Lawrence Moon at King’s College London was appointed to the advisory board of Brain in 2014 as a result of his membership of a working group and steering committee on the use of animals in research and design of experiments using animals. His aim is to improve experimental design using animals by persuading Brain’s editorial board to require manuscript authors to report how experiments using animals were blinded and randomised, and if not, to justify why not.

**Membership of learned societies**

MRC researchers reported being made a Fellow of several learned societies, including Fellows of the Academy of Medical Sciences, the Royal Society, the Royal Society of Edinburgh and the Society of Biology. Being awarded a Fellowship of these societies is a testament to the researchers’ exceptional contributions to, and eminence in, the research field.

Each year, the Royal Society elects up to 52 new fellows, from a group of more than 700 nominations made by the existing Fellowship, through a peer-review process that culminates in a vote by current fellows.

The Academy of Medical Sciences elected 44 new Fellows in 2013, bringing their total to 1,094; the Royal Society of Edinburgh elected 47 new Fellows in 2013, which brought their total to more than 1,500.

Researchers reported that this recognition also increased the profile of the individual and group, leading to increased opportunities for networking and collaboration and enhanced awareness of the scientist’s particular field.

**Attracted visiting staff or internships to laboratory**

Many MRC researchers attracted visiting staff or internships to their laboratories – an indication of the wide reach of their reputation within their field. These included visiting researchers from around the world aiming to learn or refine techniques or scientific methods, and hosting those holding scholarships or fellowships and visiting collaborators.

Dr Eva Petermann at the University of Birmingham reported the visit of a PhD student from Germany to learn DNA replication methodology.

Dr Jonathan Powell at the Human Nutrition Research Group hosted a group of 10 visiting workers and students from various universities around the world who worked on specific projects within the research group.

Dr Peter Thelwall at the University of Newcastle hosted staff from the University of Edinburgh to observe and learn techniques for in vivo 13C magnetic resonance spectroscopy, with the aim of using the techniques in research.
programmes at their university. This broadened collaborative network increased his profile in the field and yielded discussions regarding future research applications and directions.

**Professor David Brooks** at Imperial College London hosted a doctor from University Hospital Pisa who wanted to gain experience in PET imaging and dementia research.

**Dr Jennifer Gregory** from the University of Aberdeen reported the visit in August-September 2013 of a clinical research fellow from the United States as part of a three-year NIH award. The fellow learnt about bone analysis techniques which could be applied to her study. The visit led to a collaboration between the two institutions resulting in the development of a new model for examining the shape of ankle bones in osteoarthritis. Data from this visit has been used to apply for funding to develop this collaboration.

### Research prizes

Award holders highlighted a large number of reports of prizes awarded either to the principal investigators personally or to a member of their team. Researchers reported prizes being awarded for a variety of reasons, including posters and presentations (often made by students or early-career scientists), good science communication, academic papers and lifetime achievement.

The primary reported impact of such recognition was the increased profile of the scientist and of their work. Others received grants or invitations to present at prestigious conferences and many reported increased career progression opportunities.

**Professor Jim Smith**, director of the MRC National Institute for Medical Research was awarded the 2013 Waddington Medal. The Waddington Medal is the only national award in developmental biology and is awarded for outstanding research performance as well as services to the subject community.

**Professor Venki Ramakrishnan** at the MRC Laboratory of Molecular Medicine was awarded the 2012 Federation of European Biochemical Societies (FEBS) Sir Hans Krebs Lecture and Medal for outstanding achievements in the field of biochemistry for his work on the structure and function of the ribosome.
Research led by Professor Simon Griffin and Dr Rebecca Simmons at the MRC Epidemiology Unit, University of Southampton, has won the British Medical Journal’s prestigious Research Paper of the Year award in 2013. The paper presents the results of the ADDITION study which was the first robust evaluation of diabetes screening and suggested that its effectiveness may have been overestimated5. The authors concluded that screening is only likely to benefit the small minority of people with undiagnosed diabetes and is unlikely to reduce deaths in the general population.

A team at Cardiff University, led by Professor Alison Kemp and Dr Sabine Maguire, was awarded the British Medical Journal’s Child Health Team of the Year award in 2013. The team has developed an internationally-recognised methodology for systematically reviewing world literature with regard to child abuse and neglect. Over the past ten years, their focus has been on the recognition and investigation of suspected abuse or maltreatment, providing current and accessible literature, while also recommending a research agenda for those working within the field. The BMJ awards help to celebrate those who make a valuable contribution towards improving the quality of healthcare.

Professor Matthew Walker at University College London was made an International League Against Epilepsy (ILAE) Ambassador in 2013 in recognition of outstanding international contributions to activities advancing the cause of epilepsy, either internationally or with international impact. Professor Walker has organised international workshops in epilepsy and neuroscience and contributed to the SIGN epilepsy guidelines6. He also co-produced the BBC website’s guide on epilepsy and wrote the British Medical Association educational module on status epilepticus.

Dr Conor Farrington at the Open University was awarded the Royal Statistical Society’s Bradford Hill medal in 2013 for his development of the self-controlled case series method7 and outbreak detection systems. Dr Farrington developed the world’s first comprehensive, automated outbreak detection system which is capable of monitoring more than 3,000 infections and was used during the 2012 Olympics.

The Bradford Hill Medal is awarded every three years to a Fellow of the Society in recognition of ‘outstanding or influential contributions to the development, application or exposition of medical statistics’8.

Professor Cyrus Cooper, director of the MRC Epidemiology Unit was awarded the International Osteoporosis Foundation (IOF) Medal of Achievement for significantly advancing the field of osteoporosis through original and outstanding scientific contributions. Professor Cooper’s key research contributions include: discovery of the developmental influences which contribute to the risk of osteoporosis and hip fracture in late adulthood; demonstration that maternal vitamin D insufficiency is associated with sub-optimal bone mineral accrual in childhood; characterisation of the definition and incidence rates of vertebral fractures; leadership of large pragmatic
randomised controlled trials of calcium and vitamin D supplementation in the elderly as immediate preventative strategies against hip fracture.

Dr Liz Sampson at University College London was awarded the William Farr medal by the Worshipful Society of Apothecaries in 2014 for her contribution to the care of older people with dementia in the acute hospital, particularly with regards to pain and end-of-life care.

The William Farr Medal is for medical practitioners who have made a particularly significant contribution in any clinically related or research discipline to the management of elderly people as part of original work in the UK. The Worshipful Society of Apothecaries of London wishes to acknowledge innovations in the care of the elderly and particularly encourages the nomination of those in the middle of their career.

Professor Doug Higgs at the MRC Molecular Haematology Unit was awarded the Royal Society’s Buchanan Medal in 2013. The Buchanan Medal is awarded biennially ‘in recognition of distinguished contribution to the medical sciences generally.’ Professor Higgs was awarded the medal for his seminal work on the regulation of the human alpha-globin gene cluster and the role of the ATRX protein in genetic disease.

The Grete Lundbeck European Brain Research Prize – ‘The Brain Prize’ – is awarded to one or more scientists who have distinguished themselves by an outstanding contribution to European neuroscience. It was presented to Professor Peter Somogyi, director of the MRC Anatomical Neuropharmacology Unit in 2011, Professor Gero Miesenböck at the University of Oxford in 2013 and Professor Trevor Robbins at the University of Cambridge in 2014.

2011
With Professors Tamás Freund and György Buzsáki, Professor Peter Somogyi was recognised for his ‘wide-ranging, technically and conceptually brilliant research on the functional organization of neuronal circuits in the cerebral cortex, especially in the hippocampus, a region that is crucial for certain forms of memory.’

2013
Together with fellow researchers, Professor Gero Miesenböck was awarded the prize for the ‘invention and refinement of optogenetics. This revolutionary technique allows genetically specified populations of neurons to be turned on or off with light, offering not only the ability to elucidate the characteristics of normal and abnormal neural circuitry, but also new approaches to treatment of brain disorders.’

2014
Professor Trevor Robbins, alongside Professors Stanislas Dehaene and Giacomo Rizzolatti, was awarded the 2014 prize for his ‘pioneering research on higher brain mechanisms underpinning such complex human functions as literacy, numeracy, motivated behaviour and social cognition, and for their efforts to understand cognitive and behavioural disorders.’
The MRC Millennium Medal, which recognises MRC-funded scientists for outstanding research, was awarded jointly in 2013 to Professor Sir Philip Cohen, former director of the MRC Protein Phosphorylation Unit and Professor Sir Greg Winter, formerly of the MRC Laboratory of Molecular Biology.

### 2013 Orders of Chivalry

**Professor Nicola Cullum** at the University of Manchester was appointed as a Dame Commander of the Order of the British Empire for services to nursing research and wound care. Professor Cullum is one of the UK’s leading nurse researchers. She has led major multi-centre trials which have delivered significant impact on nursing practice and also founded the Cochrane Wounds Group, the world’s first centre for evidence-based nursing.

**Professor Anne Johnson** was appointed as a Dame Commander of the Order of the British Empire for services to the study of infectious diseases. Professor Johnson has studied the epidemiology and prevention of HIV and sexually-transmitted diseases and other infectious diseases for over 25 years. She co-directed the MRC’s UK Centre for Co-ordinating Epidemiological Studies of HIV and AIDS from 1985 until 1999 and has led the three National Surveys of Sexual Attitudes and Lifestyles.

**Professor Carol Robinson** was appointed as a Dame Commander of the Order of the British Empire for services to science and industry. Professor Robinson is widely recognised for her ground-breaking research in mass spectrometry and as a role model for female scientists.

**Professor Stephen O’Rahilly** has been appointed a Knight Bachelor for services to medical research. Professor O’Rahilly is a leading clinical researcher in the field of metabolic disorders and is renowned for combining clinical practice with scientific and clinical studies focused on understanding the causes and consequences of obesity and insulin resistance.

**Professor Peng Tee Khaw** at University College London was appointed as a Knight Bachelor for services to ophthalmology. Professor Khaw is a master of innovation in his field by developing new therapies, particularly for scarring. He has developed surgical techniques — such as the Moorfields Safer Surgery System — which have markedly improved the safety and outcome of glaucoma surgery and new anti-scarring regimes based on laboratory research, leading to large international clinical trials and use. These treatments and techniques have been successfully adapted for use in many parts of the developing world at minimal cost.

**Professor Wendy Atkin** at Imperial College London was awarded an Order of the British Empire for services to bowel cancer prevention. Professor Atkin led the flexi-scope study, a large trial of a bowel-screening technique which allows doctors to both detect the early stages of bowel cancer and remove precancerous polyps to prevent bowel cancer from developing.

**Professor Jenny Donovan** at the University of Bristol was awarded an Order of the British Empire for services to social medicine. Professor Donovan is the principal investigator of research grants valued at more than £45 million, including the NIHR-HTA programme-funded ProtecT randomised controlled trial — now the largest study in the world evaluating treatments for localised prostate cancer. She is involved in a wide range of other projects using molecular, clinical and social science approaches, as well as leading innovative qualitative research in randomised controlled trials.
End Notes

2. Eos, Vol. 94, No. 11, 12 March 2013
3. And MRC Deputy CEO and Director of Strategy from 1 April 2014