

# MAHSC

Manchester Academic Health Science Centre (MAHSC)

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NHS

# NEWSLETTER

September 2011



## The Great Manchester Health Experiment is a success

On Wednesday September 14, a world-first took place in Manchester, when MAHSC held an experiment to reflect the mood of the city's population. Based on the scientifically evaluated Manchester Colour Wheel, developed by Professor Peter Whorwell and Dr Helen Carruthers of The University of Manchester, the experiment asked people to register their mood by selecting the colour that best represented how they were feeling at 9am. Then, after being encouraged to do an activity known to improve well-being, they repeated the exercise at 3pm. These responses were then turned into a multi-coloured head on the BBC screen in Exchange Square, helping us to capture the mood and face of the city.

Early indications suggest that, in spite of the wind and the rain, Manchester got happier as the day progressed. The question everyone seemed to be asking was 'what is Manchester's favourite colour?' In the morning it was purple, and in the afternoon it had changed to bright yellow. Researchers are looking at the findings in greater depth, and will publish the results shortly.

Professor Ian Jacobs, Director of MAHSC and Dean of the University's Faculty of Medical and Human Sciences, said "This was a fun day with a serious message. Parts of Greater Manchester have the worst life expectancy rates in the country, but the city also has some of the best medical and scientific researchers in the world working at The University of Manchester and our MAHSC partners within the NHS. But we need to engage with the people of Greater Manchester if we are going to turn scientific discoveries in our laboratories into the medicines of the future to help cure diseases, like cancer, diabetes and heart disease, and generally improve the health of the population of Greater Manchester and the rest of the country."

Schools played a big part in the Experiment, and we recruited a new generation of citizen scientists, who now understand the importance of MAHSC and its partners as we work to improve the health of people, families and communities. MAHSC also gained the support of celebrities on Twitter, including Joan Collins, Miss Manchester and Manchester United and Manchester City players. The national and regional media picked up the story, and interesting debate was sparked on various current affairs shows including BBC Radio 4's flagship 'PM' and BBC Radio 5 Live, as well as BBC North West Tonight, Key 103 and BBC Radio Manchester.

Musicians, dancers and artists are all currently working on contributions based on the findings, and they will join the researchers in presenting their work before an invited audience on Wednesday December 9 at a special event at MediaCity:UK. To find out more, please go to [www.manchestrexperiment.org.uk](http://www.manchestrexperiment.org.uk).

## Director's Diary



Whilst many of us have been lucky enough to get some time away over the summer holidays there have been some important developments for MAHSC.

I was delighted with the success of the application to NIHR for funds to support a new Biomedical Research Unit (BRU) in Musculoskeletal Translational Medicine; this is important recognition of the quality of research in musculoskeletal research being conducted by the team led by Professor Deborah Symmons. It is built upon outstanding collaborative interactions between the University and Central Manchester University Hospitals NHS Trust and will bring important benefits for the quality of life of our patients. Please read more about the BRU later in this newsletter. Unfortunately the overall outcome of this round of NIHR BRC's and BRU's was less satisfactory for Manchester, the North West and indeed everywhere except the Southern region of England. This raises troubling issues about the distribution of research funds and the knock on social, economic and health implications which will be an ongoing priority area for us.

Just before the break appointments were made to two important MAHSC roles. Professor Bonnie Sibbald was appointed as Director of the University's Institute of Health Sciences and will therefore take on the role of Lead for the MAHSC Implementation and Health of the Public Section. Bonnie is also the Director of the Greater Manchester Collaboration for Leadership in Applied Health Research & Care

(CLAHRC) and brings a wealth of knowledge and experience to MAHSC. In June a survey of University and NHS partner activity in global health was conducted which revealed over 90 projects. On the basis of this an open meeting on global health was held in July with an excellent programme and attendance at which it was agreed that the best way forward would be to establish a MAHSC Global Health Section. This was approved by the MAHSC Board and the post of Global Health Section lead was advertised. I am delighted that Professor Tony Redmond has been appointed as Lead for a new MAHSC Sector in Global Health. The creation of this new section and Tony's appointment highlights our aim for MAHSC to have a broad ranging impact beyond the UK. It builds on a significant track record within Manchester including Tony's own work in emergency humanitarian assistance which led to the establishment, with Prof Bertrand Taithe, of the Humanitarian and Conflict Response Institute (HCRI) involving the University, and University Hospital South Manchester NHS Foundation Trust. The HCRI has been chosen as an academic partner by the International Federation of the Red Cross and Red Crescent. This just one of many projects being led by MAHSC staff in global health. Another example of important work relevant to global health being carried out in the University is the Brooks World Poverty Institute chaired by Nobel Laureate Professor Joseph E. Stiglitz. This centre was established in 2006 to create and share knowledge to end poverty in both Northern and Southern hemispheres, and to shape policies that deliver real gains for people in poverty.

As this newsletter was being prepared, we were in the midst of the Great Health Manchester Experiment. The aim was to engage the population of Greater Manchester in a fun 'experiment' to measure their mood using the Manchester Colour Wheel (developed in a clinical context) with a serious message to explain to members of the public the importance of health research and well being activities. This venture was conceived by Susan Osborne, the Communications lead for MAHSC and Linda Magee, MAHSC's Chief Operating Officer, with help from colleagues from NW e-Health along with tremendous support from the media, local companies, artists and musicians plus both Manchester City and Manchester United Football Academies – the first time the two clubs have come together for such an event! And all of this, remarkably, came at no cost! A big thank you to Susan, Linda and all who have supported this event.

Finally, a review of MAHSC priorities and plans has commenced this week. This follows on from completion of the draft strategy for the Faculty of Medical and Human Sciences and completion of a consultation about a new structure for the Faculty which is intended to align well with MAHSC. The MAHSC review will not be a full revisiting of the strategy which is sound but will focus on identifying and delivering specific priority projects, on some aspects of MAHSC leadership/organisation and on engagement broadly with staff across the MAHSC partnership. It will include a series of open forums in each partner organisation to explain MAHSC aims, projects and initiatives and how staff can get involved.

**Ian Jacobs**  
**MAHSC Director**

## Member successes

### Manchester climbs further in league table

The University has climbed to 38th place in the respected world rankings table. It is now sixth in Europe, and fifth in the UK. Since 2004, improvements in the Shanghai Jiao Tong Academic Ranking of World Universities has been one of the University's main benchmarks for success, central to the pursuit of the *Manchester 2015 Agenda*. President & Vice-Chancellor Professor Dame Nancy Rothwell said: "Manchester is now tantalisingly close to realising the vision of my predecessor, Alan Gilbert. Although we are planning beyond 2015, this is an important milestone in our journey towards the top 25, and it is a tribute to our outstanding staff".

### 5 Live documentary about new Christie trials unit

The work of the new early phase clinical trials unit at The Christie featured on Radio 5 Live in two documentaries in August. They covered the clinical research undertaken at The Christie, and included interviews with Christie research consultants and patients.

### Central Manchester University Hospitals NHS Trust (CMFT) to take on services for Trafford Healthcare NHS Trust

CMFT announced recently that they have been selected by Trafford as the preferred partner to take forward the development of local hospital services for the people of Trafford. The next stage of the formal process will involve us in negotiations over the detailed terms of the acquisition to ensure that the interests of patients are protected and the provisions of local hospital services remains stable during the transition period.

### Salford Radiotherapy Centre Opens

The Christie's new £18 million radiotherapy centre in Salford opened for the first patients in July. It will treat around 60 patients a day from Salford, Wigan & Bolton, and will also provide a specialised neurosurgical technique called stereotactic radiosurgery, making it one of only a handful of such centres in the UK.

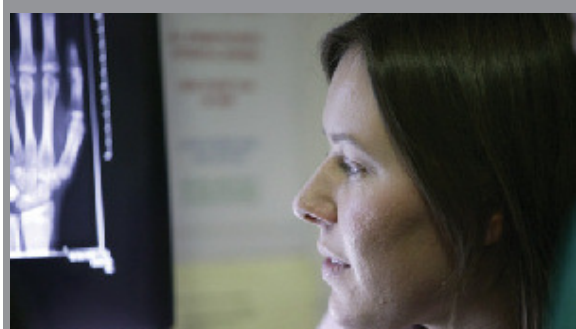
## People & places

### £2.8M funding for major ageing research drive

Teams led by Professor James Nazroo, School of Social Sciences, and Professor Brian Derby, School of Materials, received a quarter of the research funding of the Lifelong Health and Wellbeing initiative. The £2.83 million award is part of the £11.5 million cross research council programme co-ordinated by the Medical Research Council (MRC). Drawing on expertise from across the university, the teams will carry out innovative multidisciplinary research to address



determinants that influence health and wellbeing in later life. With the first grant Professor Nazroo will target inequalities in later life frailty and wellbeing, bringing together leading academics from biological, clinical and social sciences. The awards build on efforts by Professor Nazroo and others to establish Manchester as an interdisciplinary centre for ageing through the Manchester Interdisciplinary Collaboration for Research on Ageing (MICRA). The second grant goes to Professor Brian Derby who said: 'We are excited by the opportunity the award has opened for collaboration between Materials Scientists, Life Scientists and Clinicians based in Manchester. By developing new techniques for the characterisation of the elasticity and stiffness of ageing tissue, we hope to improve understanding of the physical processes of ageing and how they impact on the well being of an ageing population.'



### New Biomedical Research Unit to open

Patients across the North West and beyond are set to benefit from a new research unit in Manchester which will investigate the treatment of arthritis and other diseases affecting the joints & muscles. Manchester NIHR Biomedical Research Unit (BRU) will be run in partnership by Central Manchester University Hospitals NHS Foundation Trust & The University of Manchester. The partners already have a well-regarded Musculoskeletal (MSK) Research Group, and have successfully applied to the National Institute for Health Research for almost £5 million to set up a nationally recognised BRU to extend the group's work. Led by Professor Deborah Symmons, the

team of researchers and clinicians will pioneer new methods of assessing early response to treatment in adults and children with MSK disease, new ways of preventing rheumatoid arthritis and its complications, new therapies for arthritis and new resources for patients to help them achieve the best response to treatment. The teams theme research theme is, 'Treating arthritis: right first time'. By understanding why some patients respond to certain treatments and others do not, we will be able to ensure that patients get the right treatment for them from the earliest weeks of disease. Indeed, in the case of rheumatoid arthritis, we believe that we will be able to prevent the disease developing in people who are at high risk.

## People & places

### Tamoxifen study

The UK's first study to predict which women with a high risk of breast cancer will benefit from taking tamoxifen as a preventative measure is taking place at University Hospital of South Manchester. Researchers at the Nightingale Centre and Genesis Prevention Centre will invite 200 pre-menopausal women between the ages of 33 and 46 who attend the centre's Family History Clinic to join the study over the next 12 months.

The study will assess the benefit of taking tamoxifen to prevent breast cancer – for which it is widely prescribed in the USA – in the chosen demographic. It will look at changes in biomarkers and breast density in the women and also measure the cost-effectiveness of prescribing preventative tamoxifen.

### Young Oncology Unit

The Christie is consulting with local residents on plans for a new Young Oncology Unit building. They are working with the Teenage Cancer Trust to build the premier cancer unit in the UK for teenagers and young adults and this will involve a fundraising campaign to help fund the development.

The current unit is one of only 10 dedicated teenage cancer units in the country and is the second largest. A new centre will enable The Christie to treat more young patients and to undertake more research.

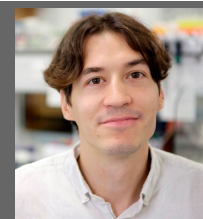
### ECMC Paediatric Network

Researchers in Manchester-led proposals for a single network paediatric Experimental Cancer Medicine Centre (ECMC), which will include all nine UK centres conducting early phase clinical trials; the Royal Marsden will be the lead centre. The aim of the network is to bring together clinicians and translational scientists to run early phase clinical trials in children and young people with cancer, building on an established network of paediatric phase I/II centres. This will ensure that early phase clinical trials are accessible to all children and young people in the UK.

The 9 centres in this network are spread across the UK, and will work in partnership, through research nurses, with both each other and non-phase I centres to maximise study recruitment, including pharmacokinetic, pharmacodynamic, biomarker and imaging studies. This will facilitate the development of targeted therapies and ultimately improve the outcome for high-risk childhood cancers.

### ERC grant for Dr Ivan Ahel

Dr Ivan Ahel, a group leader at the Paterson Institute for Cancer Research, has been awarded a major five year grant by the European Research Council (ERC). He will study proteins containing macrodomain, and their role in mediating ADP-ribosylation-dependent signalling pathways. The award is worth €1.5 million, and will fund three post-doctoral positions.



### Chris Harrison joins OECl Board

The Christie's Medical Director, Dr Chris Harrison, has been appointed to the board of the Organisation of European Cancer Institutes (OECl) and will chair a working group on prevention and early detection. This leadership is partly on the back of the Manchester Versus Cancer alliance, which was launched in 2007, and its award-winning 'Don't be a cancer chancer' campaign. Angela Ball, Research and Development Manager at The Christie, made a presentation on Research Governance to the OECl Scientific Conference. The OECl is a partnership between around 60 leading cancer centres across Europe that set standards in cancer services across the continent. The Christie was the first NHS hospital to become a member in 2007, and the OECl accreditation programme was launched in October 2008.



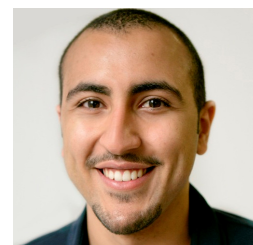
### CR-UK Translational Cancer Research Prize

The Cancer Research UK Translational Cancer Research Prize for 2011 has been awarded to the Clinical and Experimental Pharmacology team headed by Professors Caroline Dive and Malcolm Ranson. The judging panel highlighted the outstanding contributions made by the team to biomarker-enhanced early clinical trials as well as the significant impact made by their work on circulating tumour cells and circulating micrometastases. The prize, consisting of a research grant of £25,000, will be awarded at the NCRI conference in November 2011.



### PhD student wins Sylvia Lawler Prize

Waleed Alduaij, a PhD student in the Targeted Therapy group led by Tim Illidge, has been awarded the Royal Society of Medicine Oncology Section - Sylvia Lawler Prize. The prize is open to clinicians and scientists in training and Waleed presented work he had undertaken as part of his PhD; investigating a novel mode of cell death triggered by monoclonal antibodies in the treatment of B-cell malignancies including lymphomas and leukaemia.



### Dian Donnai wins ESHG Education prize

Professor Dian Donnai was awarded the 2011 European Society of Human Genetics (ESHG) Education Award at the annual conference in Amsterdam in June. The Award is one of only two made by the Society annually, and recognises Dian's "longstanding significant contribution to the clinical genetic sciences, education of students and clinical geneticists worldwide, the creation of the Manchester Dysmorphology Conferences which have contributed significantly to strengthening the collaboration between dysmorphologists in Europe and beyond, her wonderful dysmorphology workshops and her excellent clinical genetic books."

### New Operating Theatres Open

Two new surgical theatres opened to patients at The Christie in July. This £6 million development expands the hospital's surgical theatres to five, and enhances the highly specialised surgery offered for complex and rare cancers. Surgical teams at The Christie undertake around 4,000 highly specialist operations a year, and it is one of only two UK hospitals to treat patients with peritoneal pseudomyxoma, a very rare form of cancer which affects about one in a million people. The surgical robot also uses the most advanced technology to perform keyhole surgery to treat cancer and is the only robot in the North West. The new theatres will allow robotic surgery to be offered to many more patients leading to a quick recovery for a wide range of cancers.

## Spotlight on Research

The MAHSC Research & Development Office was launched at the end of June – look out for the progress report, which will appear in our next newsletter.

### Major publication outlines principles for improvements in dementia diagnosis



Professor Julia Snowden and her Neurodegeneration Research Group colleagues have had their paper “The clinical diagnosis of early-onset dementias: diagnostic accuracy & clinicopathological relationships” published in prestigious journal *Brain*. Dementia, including Alzheimer’s disease typically regarded as a disorder of the elderly, can affect younger people of working age, causing enormous distress to families and economic burden for society. A traditional assumption has been that different forms of dementia cannot be reliably distinguished on clinical grounds, and that a diagnosis is only possible by examining brain tissue after death.

In the Cerebral Function Unit specialist dementia clinic at Salford Royal Foundation Trust, a combination of careful history taking, neurological examination, and cognitive and behavioural evaluation has elicited distinct dementia ‘profiles’, which have been found to predict the underlying pathology, determined post-mortem through a brain donation scheme, with an overall accuracy of 97%. Measures of sensitivity and specificity for each condition approached 100%. That is, clinical diagnoses were made with an unprecedented level of accuracy. Not only that it is possible to distinguish reliably between major forms of dementia, but also, within a class of related disorders associated with degeneration of the frontal and temporal lobes, sub-types of histopathological change could be predicted based on subtle differences in patients’ clinical presentation.

The findings give confidence to scientists, whose search for genetic contributions to dementing disease, based on DNA samples from patients, depends crucially on accurate clinical classification of donors. On a practical level, the findings are important for clinical management of dementia patients. Moreover, by laying out principles for clinical diagnosis, the Cerebral Function Unit researchers have opened up the possibility of more widespread improvement in the accuracy of clinical diagnosis of dementia.

### Suicide & homicide rates fall among mental health patients

Suicide rates among people with mental health illnesses in England and Wales have fallen over the last decade, latest figures show. The 2011 Annual Report published today (Tuesday, 19 July) by the University of Manchester’s National Confidential Inquiry (NCI) into Suicide and Homicide by People with Mental Illness reveals that patient suicides have fallen from a peak of 1315 in 2004 to 1196 in 2008. The number of patient suicides has been under 1200 for the last three years.

The publication of the NCI Annual Report, which also examines homicide rates by people with mental illness in England, Wales and Scotland, coincides with the launch of the government proposals to consult on the Suicide Prevention Strategy for England. The NCI provides data on patient deaths to the strategy. Professor Louis Appleby, NCI Director and the Government’s National Clinical Director for Health and Criminal Justice, said: “We have seen a welcome improvement in patient safety over the last decade, particularly among patients in in-patient care and for those patients who are reluctant to accept treatment. However, every suicide is a tragedy and we must continue to be vigilant and improve safety for individuals in mental health care.”

### MCRC Research Published in Blood

Research by two groups within the Manchester Cancer Research Centre (MCRC) has recently yielded papers in the journal *Blood*. The first of these by the Stem Cell Biology and Stem Cell Haematopoiesis groups at the Paterson Institute for Cancer Research identifies a key step in haematopoiesis. The second paper by the Children’s Cancer group, part of the School of Cancer and Enabling Sciences, identifies factors involved in the metastatic spread of Acute Lymphoblastic Leukaemia (ALL) to the central nervous system.

### Study Reveals Molecule’s Role in Cancer

A protein molecule that ‘glues’ cells together, and so has a key role in cancer, is also responsible for many other important functions of cells, a new study has found. The study, led by Dr Chris Ward from the School of Dentistry, could lead to a better understanding of why some cancer cells are difficult to eradicate in patients, and to new treatments. The research – published in *PLoS One* – looked at the role of the cell-adhesion molecule E-cadherin in embryonic stem (ES) cells. As well as the expected findings associated with changes in adhesion, the team found that the protein may also regulate up to 25% of the genes within cells.

### Manchester Mental Health & Social Care Trust & Manchester City Council support Wellbeing of Older Adults

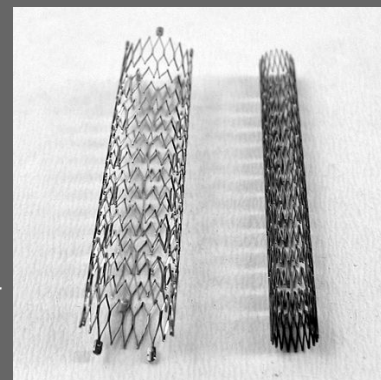
The number of people aged 65 years and over is expected to rise by nearly 60 per cent in the next 25 years from 9.6 million to over 15 million in 2031 and a preventative approach to mental well-being could lead to significant cost savings. However, there are currently no validated programmes within the UK which target the wellbeing of older adults who may be vulnerable but who are not in contact with psychological services. A 2009 pre-pilot project centred on a six week course “Be Well, Age Well” written by Mental Health professionals (Alison Marriot, Catherine Cross & Leila Jackson) based within the Trust’s Psychological Services which offers an intervention designed specifically for individuals over the age of 55 who have mild to moderate functional mental health problems is now continuing on to a pilot with a funding proposal in partnership with Manchester City Council, Age Concern Manchester and the University of Manchester.



## Business Buzz

### Manchester surgeons first in UK to use new stent device

Vascular surgeons at Manchester Royal Infirmary (MRI) have carried out the first four operations in the UK to repair abdominal aortic aneurysms using a new stent device, designed to enable a much broader group of patients to benefit from minimally invasive surgery. The four MRI patients had their operations in May and early June and all are recovering well. The pioneering surgery was carried out by Mr Ferdinand Serracino-Ingloft and his team, using the new Ovation abdominal stent graft system made by US company TriVascular Inc. An aortic aneurysm occurs when the aorta, the largest artery which runs through the body, balloons or widens. The aneurysm weakens the wall of the artery and can lead to it rupturing, with potentially fatal consequences. A stent is used to allow blood to by-pass the aneurysm. This is known as endovascular aortic repair (EVAR). "Our team was delighted to be the first in the UK to trial this new device, and we believe there will be major benefits for patients," said Mr Serracino-Ingloft. "It is a much simpler and less traumatic procedure for the patient, can be done with a spinal epidural rather than general anaesthetic and just involves an overnight stay in hospital. There are fewer risks of damage to the artery, and only a small nick in the skin is required to insert the stent, so recovery is extremely quick. All these factors mean that the option of EVAR will be available to many more patients for whom surgery with standard-sized stents may be too risky. Manchester is a major UK centre of excellence for vascular surgery, and we treat around 120 patients with aneurysms every year. Our team is keen to work with companies like TriVascular, and to help achieve major breakthroughs in surgery for this potentially life-threatening condition."



### Experts talk sun safety with Boots

Leading dermatologist Professor Chris Griffiths and his team joined Sunshine Sam, mascot of high street chemist Boots, to encourage people to top up their sunscreen, courtesy of Boots' Trafford Centre store and its Soltan range, and gave advice on how to get sun-smart this summer. The first event took place at Manchester Museum as part of the museum's 'Summer on the Allotment' event, where people also got tips on growing their own food and the second at Salford Royal Hospital. The British Skin Foundation and the British Association of Dermatologists have provided the team with sun safety tips to share with visitors to the event. Chris said: "Some sunshine can be good for us, helping the body produce Vitamin D, which is essential for good bone health, but over exposure to the sun can lead to a range of skin problems. However, it is still possible to enjoy the nice weather this summer by taking a few important steps to protect the skin, such as using a high factor SPF 5 star UV sunscreen daily."



## Events

### 6th Annual Cardiorenal Forum

'Cardiorenal medicine in the changing health service'

This conference will highlight the important clinical overlap that exists between patients presenting with a primary cardiovascular or renal problem. It aims to raise awareness and bring together clinicians who are involved in the management of such patients in order to improve patient care. The event will take place on **Friday 7th October** at the Royal Society, 6-9 Carlton House Terrace, London, SW1Y 5AG. Registration is now open at [www.cardiorenalforum.com](http://www.cardiorenalforum.com).

### Marketing & Clinical Trials Workshop

Greater Manchester Comprehensive Local Research Network (GMCLRN) and Manchester Biomedical Research Centre (MBRC) are holding a morning workshop on **Wednesday 5th October** in association with Global Radio to demonstrate the effectiveness of using marketing communications to recruit members of the public to clinical studies. The workshop is aimed at researchers who want to increase the number of patients on their studies using tried and tested marketing and communications techniques. It will feature presentations from Capital Radio and experts in social networking, PR and NHS ethics. To register, click [here](#).

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MAHSC is a partnership between The University of Manchester, Central Manchester University Hospitals NHS Foundation Trust, Manchester Mental Health and Social Care Trust, NHS Salford (Salford Primary Care Trust), Salford Royal NHS Foundation Trust, The Christie NHS Foundation Trust, University Hospital of South Manchester NHS Foundation Trust.

Are you a MAHSC member with a good news story? If so, please email it to [mahsc@manchester.ac.uk](mailto:mahsc@manchester.ac.uk) with subject line 'MAHSC newsletter'.