

Welcome to Neighbourhood News

Welcome to the fifteenth issue of Neighbourhood News - a newsletter from the Manchester Cancer Research Centre (MCRC) to keep our neighbours up to date with developments and news from the MCRC and the new cancer research building for MCRC scientists. The newsletter is distributed to over 2,000 households in the local community and is produced every two months. We hope you find Neighbourhood News informative and helpful.

Inside this issue

- ▶ Raising awareness of bowel cancer
- ▶ Celebrating clinical trials success
- ▶ New Chief Executive at The Christie
- ▶ Green Travel Plan progress
- ▶ Nobel Prize-winning graphene shows anti-cancer potential
- ▶ Schoolgirl comments inspire antibiotics investigation for cancer
- ▶ New approach to test effectiveness of anti-cancer drugs
- ▶ The Christie construction updates
- ▶ MCRC construction update

About the MCRC

- 2015 marks nine years since the MCRC was established as a partnership between three organisations – The University of Manchester, The Christie and Cancer Research UK.
- As one of the largest cancer centres in Europe, The Christie treats around 8,000 patients every year with radiotherapy.

Find out more about the new cancer research building and the MCRC here:

www.mcrc.manchester.ac.uk/newbuild/

Neighbourhood News

Raising awareness of bowel cancer



With April marking national Bowel Cancer Awareness Month, local DJ Gareth Brooks shares his experience to raise awareness of the fourth most common cancer in the UK.

Like many bowel cancer patients, Gareth first went to see his GP after a few episodes of blood in his stools and changed bowel movements over a period of months. Blood in stool is often due to piles (haemorrhoids) and initial investigations suggested this was the case for Gareth, but as a precaution he was referred for further tests including a camera investigation which led to a diagnosis of bowel cancer in October 2013.

"It hadn't really occurred to me that it might be cancer – I put the changes down to the hectic lifestyle and irregular hours that most DJs have. It took a while for my diagnosis to sink in," said Gareth. What followed was a whirlwind of further tests and as Gareth was relatively young – aged just 42 years at diagnosis – an aggressive treatment approach was recommended.

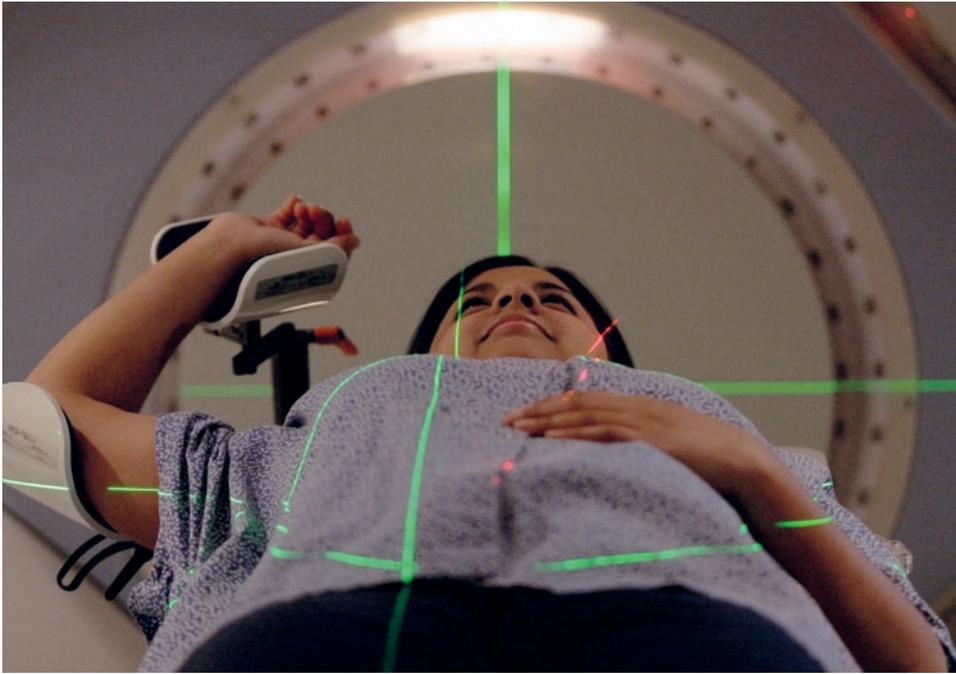
He was entered into a clinical trial at The Christie – the Copernicus trial. Unfortunately he had side effects to the chemotherapy and had to stop this part of the treatment but went on to have radiotherapy. While at The Christie, Gareth launched a three-month 'Beards Against the Cancer' campaign raising over £2,500 before undergoing surgery at Salford Royal Hospital in January 2014 where he now has regular check-ups.

"I won't get the all clear for five to seven years but so far there's no sign of recurrence. I know that my cancer journey has changed me – I make more time for my friends and family and will be getting married this year to Catherine, who has been my constant rock and support. My experience at The Christie showed me how lucky we are to have this kind of expertise and care here in Manchester and I now do as much as I can to raise awareness of bowel cancer, the need for vigilance and the importance of getting symptoms checked out no matter how minor you may think they are," said Gareth.

Find out more about More Tomorrows and how you can get involved with fundraising for the new MCRC building here: www.moretomorrows.org



Celebrating clinical trials success



As researchers around the world prepare for International Clinical Trials Day, researchers in Manchester are celebrating being the top recruiters of cancer patients to clinical trials in radiotherapy.

According to latest figures from the European Organisation for Research and Treatment of Cancer (EORTC), doctors at The Christie NHS Foundation Trust have recruited the largest number of patients between 2011–2013 into clinical trials of radiation-based therapies.

The Christie is by far the leading recruiter in Europe, which means that more and more patients diagnosed with cancer in the North West are receiving potentially life-saving novel treatments and helping the development of the latest cutting-edge technologies.

International Clinical Trials Day is held on or near 20 May every year and commemorates the day over 260 years ago when the first known controlled trial began. Undertaken by James Lind in 1747, the trial compared different treatments for scurvy being commonly used by the British Royal Navy.

For more information on clinical trials visit cruk.org/trials

New Chief Executive at The Christie

Roger Spencer – Interim Chief Executive at the Trust since December 2013 – has been appointed as permanent Chief Executive and has worked for the Trust since April 2006.

Roger said: "I'm delighted and honoured to be leading an organisation as successful and well-respected as The Christie, supported by a dedicated team of staff, members, fundraisers and supporters. We have some exciting and ambitious developments planned for the next few years, all of which will improve the care and treatment we can offer our patients."

Green Travel Plan progress

The Christie is committed to sustainable development and continues to work on a Green Travel Plan with the aim to reduce the number of single occupancy vehicles travelling to the site.

A pilot Park and Ride scheme launched last month to 120 members of staff. This scheme enables staff to park offsite at Hough End Playing Fields off Mauldeth Road, from where a regular bus service then transports staff to the main Christie site. Following high take up of the pilot scheme, there are plans to develop the scheme further to include capacity for up to 240 car parking spaces in the future.

Three shower cubicles have been fully refurbished for staff who choose to cycle to work and over the year a further three shower facilities and a dry room will be installed.



News from around the MCRC

Nobel Prize-winning graphene shows anti-cancer potential

Manchester scientists have used graphene to target and neutralise cancer stem cells while not harming other cells. The research team found that graphene oxide, a modified form of graphene, acts as an anti-cancer agent that selectively targets cancer stem cells. Their findings open up the possibility of preventing or treating a broad range of cancers, using a non-toxic material.

In combination with existing treatments, this could eventually lead to tumour shrinkage as well as preventing the spread of cancer and its recurrence after treatment. However, more pre-clinical studies and extensive clinical trials will be necessary to move this forward into the clinic. This potential anti-cancer role for graphene comes after Manchester scientists won the Nobel Prize for Physics in 2010 for demonstrating its remarkable properties.

Schoolgirl comments inspire antibiotics investigation for cancer

A way to eradicate cancer stem cells, using the side-effects of commonly used antibiotics, has been discovered by a Manchester researcher following a conversation with his young daughter. Breakthrough Breast Cancer Unit Director, Professor Michael P. Lisanti was inspired to look at the effects of antibiotics on the mitochondria of cancer stem cells after a conversation with his daughter Camilla about his work.

The team used five types of antibiotics – including one used to treat acne – on cell lines of eight different types of tumour and found that four of them eradicated the cancer stem cells in every test. This work may be the first step towards a new avenue for cancer treatment that is highly effective, repurposing drugs which have been safely used for decades.

New approach to test effectiveness of anti-cancer drugs

Manchester scientists have developed a new method to monitor the effect of anti-cancer drugs on very rare leukaemia stem cells. Treatment-resistant stem cells – cells that are able to repeatedly renew the leukaemia cell population – are one way that many patients experience disease recurrence when treatment stops. Any new drug must therefore be tested on such stem cells, but unfortunately they are only found in very low numbers.

Now Manchester scientists have tested a new antibody-based technique to detect structural changes that are a sign of drug activity. They were able to record changes in samples of only a few thousand critically important but rare stem cells. This new approach means that drugs could be tested on cells taken from patients, either at presentation or in a clinical trial setting. It has great potential to allow implementation of precision medicine, where patients receive the most appropriate treatment to target their individual tumour.

Christie construction updates

The Christie is due to begin a number of construction projects in 2015 on the main site in Withington.

Work has already started on Maggie's Centre, which will provide free practical, emotional and social support for people with cancer, and a 'breaking the ground' event will take place on 22 April 2015. The introduction of the UK's first high energy proton beam therapy service will begin construction in Summer 2015, and we will be starting construction on an Integrated Procedures Unit above the existing Oak Road main entrance in 2015.

Our plans are to keep patient and staff car park numbers constant as work starts on the building project, in order to minimise disruption to residents. This will be done through a number of projects:

- Park and ride - the pilot scheme launched last month and offers around 120 spaces to staff, with plans to extend the scheme in the future
- Golden Lion temporary car park, Wilmslow Road - following planning approval for a temporary car park; the site will be resurfaced, and lighting and security provided so that around 154 car park spaces are available in this area. Work commenced in January 2015 and will complete in Spring 2015
- Car parks A, B, C and D (located at the rear of Kinnaird Road car park) - following approvals, land on this site will be turned into environmentally friendly parking spaces to create approximately 168 spaces. This will include the demolition of D block. The release of these spaces will match the spaces taken over by projects as they begin construction.

For the latest car parking information from The Christie visit www.christie.nhs.uk.

Construction update



M+W GROUP

During March the finishing touches were made and the keys cut to this state-of-the-art building.

The team is currently working through the final project assessment process. Often referred to as the 'snagging' process, this involves thorough inspection of every aspect of the building to ensure it matches the original specification. If there are any discrepancies found, these are logged and then methodically corrected by the site team.



With snagging complete, the commissioning works will be completed before handover of the building to the University. During this time the final close out documentation for the site will also be issued. Finally, the landscaping works on the old contractor cabin site along Kinnaird Road are due for completion in April. This will mark completion of the entire project.

In the next issue ...

Look out for news of special events to mark the completion of the MCRC research building.

Working hours

Construction work will be carried out on site from 08.30 to 17.30 from Monday to Friday, although personnel will access the site from 07.00. A small team will progress with the internal fit-out works from 17.30 to 20.00 from Monday to Thursday but will be restricted to quiet working. No work is currently planned on Saturdays and Sundays, although it is likely that admin/surveying personnel will be on site at times.

Deliveries to site will be between 07.30 and 18.00 from Monday to Friday. No deliveries are currently planned on Saturdays and Sundays.

Timeline

- ▶ **November 2012**
Breaking the ground event marks start of construction
- ▶ **May 2013**
Structural walls become clearly visible above the boundary fence
- ▶ **January 2014**
Building weather-tight enabling internal works to progress
- ▶ **June 2014**
Building façade completed
- ▶ **February 2015**
Re-landscaping of Withington Green commences
- ▶ **March 2015**
Construction work draws to a close
- ▶ **Spring 2015**
Building completed and ready for use

Building Facts

- The new MCRC research building incorporates a range of environmentally-friendly features.
- It has high-tech aluminium cladding which has a special self-cleaning EcoClean™ coating that uses UV radiation from the sun to help attract rainwater and break down pollutants. Organic matter, such as moss and algae, which usually sticks to buildings and can accelerate corrosion, is also washed away more efficiently thanks to its slippery surface.

Contact us

For queries about the MCRC or general questions about the new cancer research building you can email us on newbuilding@mcrc.man.ac.uk or call **0161 446 3111** during office hours.