New Research Facility at Glenfield Hospital

Researchers from the Cardiovascular Biomedical Research Unit are preparing to move to new facilities in the University of Leicester Cardiovascular Research Centre. This stunning new facility, with state of the art laboratory and office spaces has been supported through £1 million in public donation, notably with support from Basement Jaxx and local industrialist and philanthropist David Wilson.

Dance giants Basement Jaxx played an exclusive DJ set at the Leicester O2 academy in May, performing for free and directing all funds from ticket sales to the Research Centre.

David Wilson announced in June that the David Wilson Foundation would donate £500,000 to the project. The gift has been marked by naming of the ground floor laboratory space ‘The David Wilson Biobank’. This area is the heart of the new facility with robotic equipment capable of processing 100,000 individuals’ samples which will enable the unit to continue its work identifying the genetic factors that contribute to risk of cardiovascular illness.

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Engaging Patients and the Public about Aortic Stenosis Research

Aortic stenosis is a narrowing of the heart valve. Sometimes it causes symptoms like breathlessness, but sometimes it has no impact on how the patient feels or their everyday life. Doctors are not sure if they should perform surgery in patients who have a narrowed heart valve but do not experience any problems as a result of this. Usually patients with an aortic stenosis but no symptoms or problems are not given surgery, but are monitored with ongoing appointments.

On November 2nd 37 members of the public with an interest in aortic stenosis came to meet Dr Gerry McCann and talk to him about a research project exploring treatment of aortic stenosis in patients who do not experience any associated symptoms.

The purpose of the meeting was to find out whether patients who had aortic stenosis would consider surgery if they did not have any associated problems and to find out how many patients would be likely to take part in a research project if they had been offered the chance.

69% of those in attendance, most of who had been treated for aortic stenosis, agreed that they would want surgery to treat the narrowing even if they did not have any problems from the condition. One gentleman explained ‘If I knew something was wrong, I would want it fixed.’ There was a lot of discussion about how this would mean taking the small risk that something went wrong in surgery given that the aortic stenosis was not causing any problems.

63% also said they would be likely to take part in a research project where they had an equal chance of getting early surgery or being monitored.

There was interesting discussion about the idea of doctors not knowing what the best treatment option is and several visitors felt that it was interesting to learn more about the link between research and care.
GENVASC

Are you attending an NHS Health Check in Leicester City? If so you may be invited to take part in our research project about the genetic risk factors associated with heart disease. The GENVASC project has been supported by hundreds of patients already and will soon be offered to patients in most GP Practices in Leicester.

New healthcare depends on scientific research. The blood tests and information collected for the NHS Health Check is very accurate for predicting which people are at high risk of heart disease by looking at lifestyle, family history, and cholesterol in the blood. The NHS Health Check results for a patient mean that they can make changes to reduce their risk and the GP can offer them interventions which reduce their risk, such as prescribing statins.

However, the Health Check information doesn’t always identify everyone who may go on to have heart disease. The Biomedical Research Unit staff and the GP Practices are therefore working together to see if the inclusion of more detailed information about family history, specifically genetic information, makes the Health Check more accurate at identifying everyone who is at risk.

Public support for this project has been impressive, and it is essential as genetic research requires us to compare the genetic makeup of tens of thousands of people with their healthcare records over a long period of time to see which genes are linked to development of heart disease. This project is a great example of collaboration between GP Practices, researchers from the Biomedical Research Unit and patients which has the potential to make real improvements towards preventing heart disease. It is especially exciting to be rolling out this project in such an ethnically diverse city because it gives us the opportunity to identify risky genes that may be more prevalent in people from specific ethnic backgrounds.

Want to receive the newsletter regularly and express your views on cardiovascular research?

Join our mailing list by emailing rp237@le.ac.uk.

Search Leicester Cardiovascular Biomedical Research Unit Volunteer to join our research review panel.

Contact Rebecca on rp237@le.ac.uk for more information.

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Genetic Discoveries

Researchers at the Biomedical Research Unit have identified 46 genes that increase the risk of heart diseases, particularly coronary artery disease. This means that doctors can find out about a person’s risk of heart disease from their genes.

By looking at the processes in the body affected by these genes researchers can find out more about how diseases of the heart develop. This can help them develop new ways to treat heart diseases.

The researchers have also found out about how these genes are passed from one generation to the next helping families predict their risk and manage their lifestyle accordingly. Particularly, one genetic risk associated with the (male) Y-chromosome was discovered.

Prestigious Publication

Biomedical Research Unit researcher, Dr Veryan Codd, has had an article published in the prestigious journal ‘Nature’. Her research identified seven genetic loci, specific areas on a chromosome, linked to ageing and associated diseases like heart illness and cancer.

Taking Part in Research

If you are interested in taking part in a research project please contact the PPI Officer on rp237@le.ac.uk or 0116 204 4771. You will be sent a short form to complete about your general health and contact details.
68 visitors attended a morning of talks by various groups involved in research in Leicester and Leicestershire. Dr Kamlesh Khunti spoke about the importance of exercise, and particularly exercise that is built into everyday life, and about the importance of avoiding sitting. Dr Andrew Vanezis shared his research into the use of a blood pressure cuff to cut off the blood supply to large muscles in the body which produces chemicals that can protect some people from the after-effects of a heart attack. Dr Gerry McCann discussed several research projects into the use of MRI to image the heart and inform diagnosis and treatment. Dr Mona Bafadhel and Dr Salman Saddiqui shared the NIHR Respiratory Biomedical Research Unit’s work on asthma and COPD (chronic obstructive pulmonary disease). Dr Paula Wray shared the work of the CLARHC (Collaboration for leadership in applied health research and care) on engaging with patients and the public.

After the insightful talks and an extensive and lively question and answer session, visitors enjoyed lunch and the opportunity to visit the research fair at which a range of researchers had stands about their work. A number of people took part in a project using video to collect their thoughts on research and the ways research units involve patients and the public in their work.