University Wins Funding for New Doctoral Training Centre in Imaging

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The University of Birmingham has won £6 million to create a centre for the development of the physical sciences of imaging to address key challenges in the biological and biomedical sciences.

The new Doctoral Training Centre draws on skills and expertise from across the spectrum of science, engineering and medicine at Birmingham. It will admit graduate students from the engineering and the physical sciences disciplines and will provide fifty graduates who will take up careers in the imaging industry, pushing the boundaries of that field to improve healthcare.

There is a growing need for researchers with the knowledge and understanding to produce and operate innovative imaging tools, analyse image data and understand its potential as well as having an appreciation of the challenges faced in the life and health sciences.

Enhanced biomedical imaging capabilities will lead to earlier and more accurate diagnostics and better targeted therapies. This will minimise invasive treatment and shorten recovery time, helping to alleviate the burden on the NHS.

Professor Mike Hannon from the University's School of Chemistry says, 'The continuous advancement in chemistry, physics, engineering and computer science are constantly enhancing the quality and complexity of imaging tools available to solve key biological challenges. Imaging has the capability to provide an enormous amount of information about exactly how biological processes take place down at the level of individual interacting molecules and this is the key to diagnosing, understanding and then treating disease. The technology could be used to find out, for example, how blood is flowing around the body, or how a patient is responding to a treatment or to diagnose symptoms.'

He continues, 'In order to fully realise the potential and make substantial steps forward in the imaging sciences, leading edge researchers must straddle the interface between the physical sciences of acquiring and analysing images and the challenges of biomedical science. Scientists with this broad skill base will be able to push the boundaries of the imaging disciplines and contribute to future breakthroughs in medicine.'

Fifty postgraduate students will be trained over a period of 8 years in the new Doctoral Training Centre. They will be taught by University of Birmingham experts from a range of fields including chemistry, computer science, physics, bioscience, chemical engineering, medicine and dentistry. Businesses with an interest in imaging will also play a part in contributing to formal teaching on the programme.

The £6 million funding has been awarded to the University by the Engineering and Physical Sciences Research Council (EPSRC). The bid for the money was supported by many organisations in the business of healthcare as well as AWM, Thinktank, Science City, University Hospital Birmingham, Birmingham City Council and Central Technology Belt.

Ends

Notes to Editors

The Engineering and Physical Sciences Research Council (EPSRC) is the UK's main agency for funding research in engineering and the physical sciences. The EPSRC invests around £740 million a year in research and postgraduate training, to help the nation handle the next generation of technological change. The areas covered range from information technology to structural engineering, and mathematics to materials science. This research forms the basis for future economic development in the UK and improvements for everyone's health, lifestyle and culture. EPSRC also actively promotes public awareness of science and engineering. EPSRC works alongside other Research Councils with responsibility for other areas of research. The Research Councils work collectively on issues of common concern via Research Councils UK. Website address for more information on EPSRC: www.epsrc.ac.uk/

For further information

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