New cancer detection and brain imaging techniques presented

March 27 2013

A non-invasive imaging technique which may help in the earlier detection of cancer is among the innovative research being presented at BioPIC 2013, a BioPhotonics and Imaging Conference, taking place in Castleknock Hotel and Country Club, Dublin from 25th - 27th March.

The conference is hosted by the National Biophotonics and Imaging Platform Ireland (NBIP Ireland) in association with the Royal Microscopy Society, Irish Research Council and Science Foundation Ireland. The Royal College of Surgeons in Ireland (RCSI) is the local organiser of the event. BioPIC 2013 will discuss new discoveries made through the application of light based technologies to biology and medicine. This area of research is called biophotonics and is a rapidly growing field which uses light to view and analyse living tissues and cells to detect, diagnose and treat diseases such as cancer, heart disease and Alzheimer's.

Professor Katerina Svanberg, Lund University Hospital, Sweden will speak about how 'Laser Induced Fluorescence' can monitor very early chemical changes in tissue as it progresses from normal to abnormal to cancer. These chemical changes can be visualised before any physical changes can be observed. If malignant tumours are identified during the non-invasive stage, the cure rate can be as high as 90%, reinforcing the benefits of this novel technology.

Also speaking at the conference is Professor Daniel Choquet, CNRS Institute for Neuroscience- Bordeaux University, France who will deliver

a key note speech, explaining how it is now possible to visualise single molecules within the brain. Using super resolution imaging to track the movement of neurotransmitters, a clearer picture of how the complex pathways of the brain communicate and how errors in these signals may lead to neurological and psychiatric disorders, can now be observed.

Professor Brian Harvey, NBIP Director and Professor of Molecular Medicine at RCSI, believes that BioPIC 2013 is hugely important for promoting Irish excellence in the field of photonics: 'BioPIC 2013 will build on Ireland's reputation for scientific excellence and showcase our involvement in the best imaging research to an international audience. By bringing those with high impact biological problems to solve together with those developing sensing and imaging solutions, BioPIC 2013 will stimulate innovative solutions for discovery and treatment'.

More information: For further information visit: www.nbipireland.ie/events

Provided by Royal College of Surgeons in Ireland (RCSI)