Centre for Advanced Imaging News Archive 2014

Epilepsy win for CAI Scientists

Congratulations to Dr Quang Tieng, Dr Simone Bosshard and Dr Min Chen who recently led an international team to victory in the Seizure Prediction Challenge, an international competition sponsored by the American Epilepsy Society, the US National Institute of Neurological Disorders and Stroke, and the Epilepsy Foundation. See the UQ press release for more information.

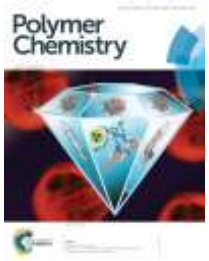
12 December 2014

CAI secures $2.5M funding from ACRF

The Centre for Advanced Imaging has been awarded $2.5M from the Australian Cancer Research Fund to establish the "ACRF Facility for Molecular Imaging Agents in Cancer". Led by Professor Reutens, this world class facility will aid the development and validation of novel molecular imaging agents for cancer. For more information, see the UQ press release or visit the ACRF website.

13 November 2014

Development of Novel Multimodal Imaging Agents



A paper recently published as the cover article in *Polymer Chemistry* by Dr Kris Thurecht and his team describes the development of novel multimodal imaging agents which can potentially be used to image diseases including cancer.

09 October 2014

UQ-Global Medical Solutions agreement to enhance patient diagnosis

CAI and Global Medical Solutions (GMS) have signed an agreement that will facilitate research, development and commercialisation of radiopharmaceuticals that are important for the diagnosis and treatment of cancer, brain disorders and cardiac disease. Read more in the UQ press release.

11 September 2014

CAI Researcher's MASSIVE effort to link genes and brain structure

A team of UQ researchers including CAI's A/Prof Katie MacMahon have used the specialised high performance computing facility, MASSIVE, to demonstrate that some connections in the brain are strongly influenced by genes. More information.

04 September 2014

AIBN/CAI Researchers seek big gains targeting tiny

The Australian Research Council Centre of Excellence in Convergent Bio-Nano Science and Technology was recently opened. It brings together 19 chief investigators from around the world, including researchers from CAI, with expertise in nanomaterial design and synthesis, cell biology, and engineering. The centre is backed by a seven-year Australian Research Council grant. Read more in the UQ press release.

28 August 2014

UQ's Centre for Advanced Imaging officially opened

Queensland Science Minister Ian Walker officially opened the Centre for Advanced Imaging on 21st August 2014.

For more information, read the UQ press release.

21 August 2014

A/Prof Markus Barth is awarded an ARC Future Fellowship

Congratulations to A/Prof Markus Barth who has been awarded a prestigious ARC Future Fellowship. A/Prof Barth was awarded $870,500 for his project, *Improved decoding of human brain activity using advanced functional magnetic resonance imaging at ultrahigh field strength*.

23 July 2014

CAI to run a 3 day workshop in Cardiac MRI

The Centre for Advanced Imaging will run this 3 day course on the 16, 17 and 18th August 2014. Registration are now open.

4 July 2014

UQ and Siemens collaboration to advance MRI technology

A collaboration agreement between The University of Queensland and Siemens Australia will boost research and development in Magnetic Resonance Imaging (MRI), leading to better diagnosis and treatment of degenerative diseases.
More information on this Agreement in the UQ press release.

27 June 2014

UQ leading the way in international research infrastructure collaboration

National Imaging Facility (NIF) and Euro-BioImaging (EBI) have recently signed a Memorandum of Understanding. The Memorandum reflects the common desire of both research infrastructures to deliver cutting-edge imaging capabilities to support multidisciplinary scientific communities across the globe.

23 May 2014

Free biomedical imaging course

Learning about brain scans and other biomedical imaging tools is now free to anyone anywhere who has access to a computer and the internet.

The University of Queensland Centre for Advanced Imaging is offering the online Introduction to Biomedical Imaging BIOIMG101x course through UQx from next week (7 April).

BIOIMG101x is a 10-week course delivered via the edX massive open online courses (MOOCs) platform.

Read more about this course in the UQ press release.

3 April 2014

UQ News TV - Centre for Advanced Imaging

The latest episode of UQ News TV goes inside the Centre for Advanced Imaging (CAI), which brings together the skills of a critical mass of researchers and 'state-of-the-art' research imaging instruments. It is the only facility of its type in Australia, and one of only a handful in the world. The $55 million CAI building was funded by the Federal Education Investment Fund in 2010 and contains over $50 million of imaging and spectroscopy equipment.

26 March 2014

First human images in the southern hemisphere acquired on a 7 Tesla whole body MRI scanner

CAI acquired the first human images in the southern hemisphere on a 7 Tesla whole body MRI scanner, on February 14th 2014.

The Siemens Healthcare system is the first to be installed in Australia and is also the Flagship instrument of the National Imaging Facility (NIF). Key technical features of the system include a high-performance gradient with multi-receive and multi-transmit radiofrequency capabilities, which further increase sensitivity.

The 7T will be used for a broad range of applications, including neuroscience, engineering, imaging and theranostics. Alzheimer's and Parkinson's diseases, Multiple Sclerosis, epilepsy, musculoskeletal and liver diseases are just a few examples of clinical applications that will benefit of the high spatial resolution achievable with this instrument.

In addition to this state-of-the art equipment, a multi-disciplinary team of scientists and engineers will contribute their expertise to studies run on the 7T.

A few facts about the 7T

- The system was delivered in November 2013
- The 7T weighs 38 tonnes
- 20,000 litres of liquid Helium were used to cool down the magnet to -270◦ C
- The 7T uses the latest Magnetom platform, engineered by Siemens

15 February 2014