

Centre for Advanced Imaging News Archive 2013

CAI Researchers receive funding for cancer research

- Associate Professor Sally-Ann Poulsen, Associate Professor Kathryn Tonissen, **Professor Ian Brereton, Doctor Gary Cowin, Doctor Karine Mardon**, Doctor Ludwig Dubois, Professor Philippe Lambin were awarded \$200,000 for two years by the Cancer Council Queensland for their project *Development of Bimodal MRI/PET Imaging Agents for Imaging of Hypoxia: The Best of both Worlds*.
- A/Prof Greig de Zubicaray, Dr Gail Robinson, A/Prof David Copland, **A/Prof Katie McMahon** were awarded \$200,000 for two years by the Cancer Council Queensland for their project *A prospective study of language function following surgical resection of left hemisphere primary brain tumours*
- **Dr Kris Thurecht** was awarded \$199,386 for two years by the National Breast Cancer Foundation for his research project on *Detection and treatment of triple negative breast cancer: Development of novel nanomedicine devices allowing simultaneous molecular imaging gene therapy and aptamer therapy*.

6 Dec 2013

2014 ARC and NHMRC Grants awarded to CAI researchers

Researchers at the Centre for Advanced Imaging have attracted more than \$2,000,000 in funding in the latest Australian Research Council and National Health and Medical Research Council grant rounds. These successful grants include an NHMRC Project Grant (Dr Nyoman Kurniawan), a Discovery Early Career Researcher Award (Dr Michael Vogel), four Discovery Projects (Dr Kris Thurecht, Prof David Reutens, Dr Viktor Vegh, Dr Mehdi Mobli and A/Prof Idriss Blakey) as well as a Linkage Infrastructure, Equipment and Facilities project (Prof Andrew Whittaker and A/Prof Idriss Blakey).

- NHMRC Project Grant: 1060538
- Discovery Early Career Researcher Award: DE140100229 Dr Michael Vogel.
- Discovery Project: DP140100951 Dr Kris Thurecht
- Discovery Project: DP140103593 Prof David Reutens,
- Discovery Project: DP140103118 A/Prof Idriss Blakey
- Discovery project: DP140101098 Dr Mehdi Mobli
- Linkage Infrastructure, Equipment and Facilities: LE140100087

12 Nov 2013

ANZMAG recognises Dr Mobli's outstanding research achievements

Congratulations to Dr Mehdi Mobli who was recently awarded the Sir Paul Callaghan Medal for Young Investigator by the Australian and New Zealand society for MAGnetic resonance (ANZMAG). This award recognizes outstanding achievements in research by early career members of the Society.



Dr Mobli received the Medal from Prof Bill Price, Chair of the Medal committee and Prof Frances Separovic, Chair of the ANZMAG society.

7 Nov 2013

NHMRC Project Grant awarded

Congratulations to Mark Ruitenber, Chair of our Small Animal Imaging Committee, and Nyoman Kurniawan on their success in the recently announced NHMRC Project Grant round. Mark, Nyoman and Stephen Taylor were awarded \$393,000 for their project, *Targeting the complement activation fragment C5a to improve the outcome from spinal cord injury*. Read more about the project [here](#).

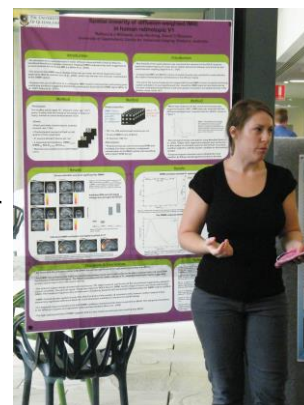
24 Oct 2013

CAI RHD Poster Day Competition

Thank you to Greg Brown, Othman Alomair, Liyu Chen, Aditya Ardana, Amanda Pearce, Grain Alshammari, Yiming Ma, Jiixin Du, Bec Williams and Farshid Sepehrband for their participation to the CAI RHD Poster Competition on Tuesday 17/09. It was great to be able to show case your research, and no doubt that we will renew the experience, hopefully to a larger audience.

We're pleased to announce that Bec Williams, received the most votes from the RHD committee for her posters. Congratulations Bec!

17 September 2013



Putting an "End" to the Motor Cortex Representations of Action Words

An article recently published in the *Journal of Cognitive Neuroscience* and co-authored by Dr Katie McMahon investigates the motor the motor cortex activity elicited during action word processing.



Difference between non word nouns and verbs.

13 August 2013

Life Enhancing Drugs

Catalyst recently did a story on life enhancing drugs, which features CAI radiographer Anita Burns and research being done on the 4T by CAI researcher Dr Katie McMahon and her collaborators Assoc Prof David Copland, Kelly Goldsworthy and Alicia Rawlings. It examines how drugs are being used to improve the mind, and talks how a drug like levodopa can improve your ability to remember new words.

Watch the video on the [ABC Catalyst website](#).

2 July 2013

The ARC will fund two new CAI Linkage Projects

In the last round of the ARC Linkage Project, the Centre for Advanced Imaging in collaboration with partner organisations, was successful at securing funds for three research projects, entitled *Advancing hybrid imaging with magnetic resonance imaging and positron emission tomography (MRI-PET)*, and *System to Synapse*.

28 June 2013

Congratulations to CAI Researchers David Reutens and Tianzi Jiang and Ross Cunnington, Chair of CAI's MRI Scientific Committee

Congratulations to CAI Researchers David Reutens and Tianzi Jiang and Ross Cunnington, Chair of CAI's MRI Scientific Committee, who are Chief Investigators on the successful \$16M bid to establish a Science of Learning Research Centre. The University of Queensland will lead a consortium, including the University of Melbourne and the Australian Council for Educational Research among a total of 7 other research organisations and 9 partner organisations, to undertake research into how we can translate knowledge about learning into practical educational outcomes: from 'bench-top to blackboard'. Imaging has been identified as a key tool to study human learning and education. The Centre includes researchers from QBI and UQ's School of Psychology and School of Education. To open this year, it has been funded under the Australian Research Council Special Research Initiative scheme.

11 May 2013

2013 ISMRM-SMRT Honorary Membership Award for Distinguished Service awarded to CAI PhD student Greg Brown

Greg has received the 2013 Honorary Membership Award for the ISMRM Section of Magnetic Resonance Technologists for Distinguished Service to SMRT. There is one awarded per year from all MRI Technologists in

the world. He is in the company of people like Frank Shellock, Emanuel Kanal, Mike Moseley, Herb Kressel, all of whom are international leaders in MRI.

This recent award is on top of his 2003 Crues Kressel award for Outstanding Contribution to Education and his 2007 Fellowship award for Significant and Substantial contributions to the Education Mission of SMRT. Congratulations Greg!

6 May 2013



Australian scientists map mouse brains in greatest detail yet

Hopes for a cure for many brain diseases may rest on the humble mouse, now that scientists can map the rodents' brains more thoroughly than ever before.

Researchers at The University of Queensland's Centre for Advanced Imaging (CAI) and Curtin University have created the most detailed atlas of the mouse brain, a development that is helping in the fight against brain disease.

29 April 2013

Aptamer-targeted hyperbranched polymers: Towards greater specificity for tumours *in vivo*.

An article written by Dr Thurecht and his collaborators has recently made the cover of the prestigious journal Chemical Communications.



23 April 2013

CAI researchers 'Heavyweight champions' of the world!

CAI PhD student Farshid ('Rocky') Seppehrband along with Jeiran Choupan, Yaniv Gal, David Reutens and Zhengyi (Steven) Yang have won the 'heavyweight' category of the 2013 High Angular Resolution Diffusion (HARDI) MRI Reconstruction Challenge held in San Francisco this week. This is an international competition between research teams to develop the best way to analyse diffusion MRI a technique that is used to create maps of the white matter tracts in the brain. Over 25 other teams competed in the contest including teams from EPFL, Harvard Medical School and Stanford but the new method developed by the team from UQ gave the most accurate results.

10 April 2013

CAI Seminar Series

Come and discover how CAI can give your research a competitive edge. Read more about the CAI Seminar Series.

9 April 2013

Genetic variants influencing brain connectivity

New research published in the prestigious journal PNAS by Dr McMahon and her colleagues has discovered genetic variants that affect the human brain's wiring.



Networks based on white matter tracks tested for heritability

22 March 2013

Imaging of the bruised avocado

A research collaboration is currently underway between CAI, UQ School of Agriculture and Food Sciences and Avocados Australia Limited, using MRI techniques to better understand how bruising develops in the fruit.

With consumers consistently disappointed by the poor internal quality of avocado fruit, the major issue for the growers is to better understand how the flesh of the fruit bruises. Until now, no detailed supply chain investigation of the relationship between handling and ripeness of avocado fruit has been undertaken.

Dr Gary Cowin and Prof Ian Brereton (CAI) participated with Prof Daryl Joyce (UQ School of Agriculture and Food Sciences) in a pilot study aiming to image bruise development over time for a set of avocado fruit impacted at a known energy level.

26 Feb 2013

Science Minister Ros Bates visits CAI

Science Minister Ros Bates praised the ground-breaking work of the University of Queensland's Centre for Advanced Imaging which is attracting international collaborations through its world-class people and facilities.

"Researchers at the Centre are using the latest magnetic resonance imaging technology to study new treatments—such as the drug IVIg—to rescue brain tissue in stroke victims," Ms Bates said.

"I am pleased to see first-hand some of the outstanding research into treating these diseases happening right here in Brisbane," she said during her tour of the CAI facilities.

8 February 2013

\$4 million in funding for National Imaging Facility

The Australian National Imaging Facility (NIF) has recently received more than \$4 million in funding from the Australian Government, Department of Industry Innovation, Science, Research and Tertiary Education (DIIRSTE), under the new Collaborative Research Infrastructure Strategy (CRIS) funding scheme.

As a continuation of the National Collaborative Research Infrastructure Strategy (NCRIS) and Education Investment Fund (EIF) that have funded NIF since 2007, the CRIS funding will be used to support Australia's pioneer imaging scientists.

"NIF will continue to focus on providing collaborative access to world-leading imaging technology infrastructure and expertise for the Australian research community", says NIF Director, Prof. Graham Galloway.

NIF's grid of imaging capability spreads across all mainland state capitals in Australia, with head office located at the Centre for Advanced Imaging (CAI), University of Queensland. For more information about NIF, access to instruments, and most recent technology installations, please visit www.anif.org.au.

18 January 2013