CLINICAL IMAGING RESEARCH CENTRE
SINGAPORE

A joint venture between the Agency for Science, Technology And Research (A*STAR) and the National University of Singapore (NUS)

The A*STAR-NUS Clinical Imaging Research Centre (CIRC) Presents Weekly Journal Club/Lab Meeting

May

Time: **2:00pm – 3:00pm, Wednesday**

Venue: **CIRC Conference Room**
Clinical Imaging Research Centre (CIRC)
Centre for Translational Medicine (MD6)
14 Medical Drive, #B1-01
Singapore 117599

Date	Speakers	Topic
7-May-14	Wei Mi Cheong & Kay Tan (CIRC)	Presentations on previous role's work experiences
14-May-14	Thomas Yeo (CIRC, NUS)	"Big Data in Neuroimaging" Neuroscientists are drowning in oceans of data. My research involves developing machine learning algorithms to analyze the imaging data from thousands of subjects. By properly modeling large amount of data, I believe we can generate neuroscience insights that were not possible with smaller datasets. In this talk, I will present work where collaborators and I interrogate the organization of brain networks in a thousand healthy young adults. These results are then used as a reference to explore the disruption of brain networks in psychosis.
21-May-14	Therese Söderlund (CIRC)	A review of the usage of the PET imaging tracers F18-NaF and F18-FDG for identification of ruptured and high-risk atherosclerotic plaques Coronary atherosclerotic plaque rupture is the principal cause of acute myocardial infarction. As most plaques are non-obstructive, detection cannot be made using stress testing or coronary angiography. A potential solution for in-vivo assessment of high-risk plaques would be to use a molecular imaging marker targeted at histopathological features of atherosclerotic lesions (e.g. microcalcification, inflammation, etc). Related paper: Joshi et al, ^{18}F-fl uoride positron emission tomography for

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		identification of ruptured and high-risk coronary atherosclerotic plaques: a prospective clinical trial. Lancet 2014; 383: 705-13.
28-May-14	Trina Kok & Fatima Nasrallah (CIRC)	ISMRM 2014 Debriefing

ISMRM: International Society of Magnetic Resonance in Medicine

Speaker Background

Wei Mi Cheong:

Wei Mi received a degree in Science (Chemistry) at the National University of Singapore (NUS) in 2005 and then worked as a lab analyst in a semi-conductor industry. She moved on as a Chemist in 2006 at MSD (legacy Schering Plough) for 7.5 years before she joined CIRC as a Radiochemist in 2014. Her main role in MSD was mainly on quality control on API products using various lab instruments such as HPLC, GC, UV, FTIR, etc.

Kay Tan:

Kay studied Chemistry and Biological Chemistry in Nanyang Technological University and graduated in 2013 with a Bachelor of Science (Honours) Degree. She had her 6 months internship in 2012 at GSK, mainly working with analytical machines such as HPLC and GC.

Thomas Yeo:

Thomas Yeo is an Assistant Professor at the Department of Electrical and Computer Engineering (National University of Singapore). He received his B.S. and M.S. in from Stanford University and Ph.D. from the Massachusetts Institute of Technology. Prior to NUS, Thomas was a research fellow at Harvard University and Duke-NUS Graduate Medical School. Thomas is a recipient of the A*STAR National Science Scholarship, the MICCAI Young Scientist Award and the MICCAI Young Investigator Publication Impact Award.

Therese Söderlund:

Medical Physicist, CIRC

MSc in Radiation Physics, Medical Applications, University College London, UK

MSc in Engineering Physics, major in Biological Physics and Medical Techniques, Royal Institute of Technology (KTH), Sweden

Trina Kok:

Trina received her bachelor's degree from Duke University in 2005, and master's and PhD degrees from MIT in 2009 and 2012. In September of 2012, she joined the A*STAR-NUS Clinical Imaging Research Centre (CIRC) in Singapore as a research fellow. She is no stranger to A*STAR, having received the A*STAR BS-PhD National Science Scholarship from 2002-2010 and joined A*STAR's Institute for Infocomm Research (I2R) as a research engineer in 2005. During her years at MIT, Trina worked on developing fast spiral spectroscopic imaging with 2D spectroscopy sequences such as CT-PRESS for brain imaging. She is interested in improving the detection and quantitation of metabolites and works to apply such techniques in clinical settings. Her current research interests lie in the wider field of MRI, multi-modal imaging, and its clinical applications.

Fatima Nasrallah:

Dr. Nasrallah is a neurochemist specialized in the application of magnetic resonance to study brain function. After completing her Master's degree in Biochemistry at the Lebanese University, Lebanon, she took on a PhD degree in 2005 on neuropharmacological approaches to understanding brain metabolism at the University of New South Wales, Australia. She is interested in studying the functional connectivity in brain and drug effect.

--- Admission is free and all are welcome ---