



# 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

### June

**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
4-Jun-14	Trina Kok, Jianhua Yan (CIRC)	ISMRM Debriefing
11-Jun-14	Dennis Cheong, Limiao Jiang (CIRC)	ISMRM Debriefing
18-Jun-14	Smitha Kenchath (CIRC), Thomas Yeo (CIRC, NUS)	Smitha: 'Quality Control Testing for Radiopharmaceutical Release'  Thomas: "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.
25-Jun-14	Eva Schneider (CIRC), Chris Chen (NUH)	Eva: Presentation on Tuberculosis  Chris Chen: Research on Dementia (Project MACC)

ISMRM: International Society of Magnetic Resonance in Medicine

### Speaker Background

Dennis Cheong:

Dennis received his PhD from the Nanyang Technological University (NTU) in 2008. He was with National Neuroscience Institute (NNI) Singapore before joining the A\*STAR-NUS Clinical Imaging Research Centre (CIRC) in Singapore in March of 2010 as a research fellow. At NTU, Dennis worked on developing distributed

parameter tracer kinetics models that incorporate more than two compartments (patented) for analyzing DCE CT of brain tumors. At NNI, Dennis worked with DTI, ASL, DCE and DSC MRI in brain. He is working on clinical research projects that utilize tracer kinetics analysis. He is interested in providing meaningful parameters that can better explain the physiology of tissue being studied by DCE/DSC MRI, DCE CT, ASL, or dynamic PET.

Jianhua Yan:

After completing his PhD's degree from Huazhong University of Science and Technology, China in 2007, he joined Yale PET center as a postdoctoral research associate working on PET tracer kinetic modeling and direct 4D parametric image reconstruction. His current interests include multi-modal imaging (PET/MR and PET/CT), image analysis and clinical applications.

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. 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.

Limiao Jiang:

Limiao Jiang obtained his BSc degree in Applied Chemistry from Huazhong University of Science and Technology in June 2006, and received his PhD degree in Analytical Chemistry from Wuhan Institute of Physics and Mathematics in July 2012. His PhD work, supervised by Prof Huiru Tang, included method developments in NMR based metabolomics and their applications in animal models, i.e. rats with hepatotoxin induced liver injury, and nude mice bearing hepatocellular carcinoma and lung cancer. From July 2012, he started to pursue his postdoctoral research as a Research Associate at Wuhan Institute of Physics and Mathematics. Then, in March 2013, he joined NUS Department of Diagnostic Radiology as a Research Associate to continue his postdoctoral career under the supervision of Prof Thain C Ng.

Smitha Kenchath:

Smitha received a Post Graduate Diploma in Pharmaceutical Systems Analysis (NUS) in 2007 and Master of Science (Chemistry) at M.G University India in 2003. She has more than 10 years of experience in Pharmaceutical companies both in India as well as in Singapore. She worked for Vysali Pharmaceuticals India, Beacons pharmaceuticals Singapore and 3M Pharmaceuticals Drug Delivery Systems Singapore before she



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joined CIRC as Head of QC. In her previous roles she handled the Quality Control on APIs and Finished product Drugs using various lab instruments such as HPLC, UPLC, GC, UV, FTIR, KF etc.

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.

Eva Schneider:

Eva studied Medicine at the University of Giessen/Germany and received her doctorate from RWTH Aachen University/Germany in 2013. As a doctoral researcher she worked in the Department of Radiation Therapy of the University Hospital of Aachen investigating the radiation therapy planning of prostate cancer using Intensity Modulated Radiation Therapy (IMRT) with an Integrated Boost. Since joining CIRC in the beginning of this year as a research fellow, Eva is mainly working on a project about primary prostate cancer diagnosis with mpMRI, PET/MRI and PET/CT with focus on localisation and grading.

Chris Chen:

Director, Memory Aging & Cognition Centre, NUHS

Associate Professor, Dept. of Pharmacology, National University of Singapore

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