

The Singapore Bioimaging Consortium (SBIC) presents a seminar on

"CMR Imaging endpoint in Clinical Research: What is the consensus from SCMR?"

Speaker: Prof Alistair Young

Department of Anatomy with Radiology

University of Auckland

New Zealand

Host: Dr Philip Lee

Date: Wednesday, 9 October 2019

Time : 11.00am - 12.00noon Venue : SBIC Seminar Room

11 Biopolis Way

Level 2, Helios Building, Singapore 138667

(Please enter via Level 1)

Abstract

Cardiovascular magnetic resonance (CMR) enables precise and accurate estimation of ventricular and atria structure and function, and deep phenotyping of developing cardiovascular disease. This talk will outline the state of the art in CMR imaging for structure and function, focusing on mass, volume, shape and strain measures, as well as mapping an flow. Current recommendation of the Society of Cardiovascular Magnetic Resonance will be reviewed from recent position statements. Current strengths and weaknesses of each technique will be reviewed and future advances using artificial intelligence methods will be discussed.

About the Speaker

Professor Alistair Young is Professor of Machine Learning and Artificial Intelligence at King's College, London, and Professor of Medical Imaging at the University of Auckland, New Zealand. He is principal investigator of the Cardiac Atlas Project which seeks to provide cardiac imaging data and analysis tools to the research community for quantification of heart shape and function changes in large cohort studies such as the Multi-Ethnic Study of Atherosclerosis and the UK Biobank (www.cardiacatlas.org). Prof Alistair's research interests are in imaging, biomedical engineering and statistical modelling of cardiovascular disease. He has been funded by the National Institutes of Health (USA), the Wellcome Trust (UK), and the Health Research Council of New Zealand. He has extensive experience working with industry to translate technologies into clinical products. He has published widely in high impact journals with over 130 journal publications. One key area of focus is cardiac imaging in relation to heart failure, congenital heart disease, and biomechanics, with a focus on large scale statistical modelling of cohorts. This involves machine learning methods for automatic detection of heart structure and function, automatic identification of regional and global heart muscle disease, quantification of phenotypes and analysis of mechanisms for functional impairment.

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