Multivariate Stats and Applications in Metabolic Phenotyping

Torben Kimhofer
Research Associate, Centre of Integrated Systems Medicine,
Department of Surgery and Cancer Imperial College - London

DATE: Thursday, 2 August 2018
TIME: Starting at 3pm
VENUE: Murdoch University, Building 490 Room 2.023
            (https://maps.murdoch.edu.au/location/14902023)
COST: Free, please RSVP to k.wong@murdoch.edu.au

Abstract:

Torben will talk about his work as a post-doc in the field of metabolic phenotyping, focusing on Nuclear Magnetic Resonance (NMR) spectroscopy applied in medical contexts. He will briefly introduce commonly applied multivariate statistical analysis techniques, such as Principal Component Analysis (PCA) and Partial Least Squares (PLS), as well as presenting outcomes of a selection of studies with clinical relevancy. Everyone is welcome - no statistics or metabonomics background required.

About the speaker:

In 2017, Torben obtained a PhD in Chemometrics from Imperial College London, and now he is a postdoctoral researcher in the Division of Computational and Systems Medicine led by Prof Elaine Holmes. During his PhD studies he focused on modelling of various types of liver diseases using statistics, pattern recognition and machine learning approaches, based on clinical data or/and data generated by mass spectrometry (MS) and nuclear magnetic resonance (NMR) spectroscopy. Torben's current research focusses on the characterisation of individuals with autistic phenotypes using a multimodal approach. This includes MS and NMR, sequencing and behavioural data.