

**ANZAC Research Institute, 13<sup>th</sup> Annual Symposium**

**Contemporary issues in Atherosclerosis, Thrombosis and  
Coronary disease**

**Friday, 29 August 2014, Concord Education Centre,  
Concord Repatriation General Hospital.**

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# Contemporary issues in Atherosclerosis, Thrombosis and Coronary disease Programme.

Friday, 29 August 2014, Concord Education Centre

08:30

Registration

09:00 Session 1 - Atherosclerosis and Innate Immunity (Chairs: Len Kritharides, Wendy Jessup)

Inflammasome activation in atherosclerosis. Mechanisms and therapeutic implications. **Eicke Latz, Germany**

SMPDL3A - a novel enzyme at the crossroads of inflammation and atherosclerosis? **Mathew Traini, Sydney**

Lipoproteins, platelets and haemodynamics in human coronary atherosclerosis. **Len Kritharides, Sydney**

Morning Tea

11:00 Session 2 - Atherothrombosis (Chair: Jenny Curnow)

Biomechanical inflammation - a distinct pathological process linking tissue ischaemia to remote organ injury.  
**Shaun Jackson, Sydney**

A first in mouse: atherosclerotic plaque rupture and how it can improve understanding and prevention in humans.  
**Karlheinz Peter, Melbourne**

Works in progress in Vascular Biology @ ANZAC  
**Gabrielle Pennings, Caroline Reddel, Vincent Chow.**

Lunch

13.30 Session 3 - Frontiers in coronary disease evaluation and management: Intracoronary physiology and imaging (Chairs: Rav Bhindi, Andy Yong)

Translating coronary physiology research. **Martin Ng, Sydney**

Intravascular imaging and its clinical applications  
**Harry Lowe, Sydney**

The next step: Integrating anatomy and physiology.  
**Andy Yong, Sydney**

Afternoon Tea

15.15 Session 4 - Lipids and Atherosclerosis. (Chairs: David Sullivan, Kerry-Anne Rye)

Lipids, Lipid Drugs and Diabetes Vascular Damage. **Alicia Jenkins, Sydney**

HDL regulates the pro-atherogenic action of serum amyloid A on the vascular endothelium **Paul Witting, Sydney**

Mechanisms of Cyclosporin A-mediated hyperlipidemia. **Maaïke Kockx, Sydney**

HDL functional heterogeneity **Wendy Jessup, Sydney**



**Eicke Latz** is Director of the Institute of Innate Immunity, University of Bonn, Germany. His research interests include the molecular mechanisms of innate immune receptor activation and of the mechanisms that lead to the activation of the NLRP3 and AIM2 inflammasome. His research aims to use understanding of innate immune receptor activation for generation of molecular tools that could lead to the development of specific diagnostics for inflammatory materials and to devise means to pharmacologically interfere with the activation of innate immune receptors in order to develop novel approaches to treat inflammatory diseases such as Alzheimer's disease or atherosclerosis.



**Len Kritharides** is HOD and Director of Cardiology at Concord Repatriation General Hospital and Professor in Medicine at the University of Sydney. He practises as a General and Interventional Cardiologist and leads the Atherosclerosis and Vascular Biology Groups of the ANZAC Research Institute. He has published on various aspects of the biochemical, cellular and clinical aspects of cardiovascular disease, hyperlipidemia and thrombosis, with a particular interest in apolipoprotein E and cholesterol metabolism in macrophages.



**Shaun Jackson** is an NHMRC Australia Fellow and faculty member at the Scripps Research Institute in La Jolla, San Diego (CA, USA). He is Director of Cardiovascular Research at the Heart Research Institute Sydney and at the Charles Perkins Centre University of Sydney. He was a co-founder of the Australian Centre for Blood Diseases (Monash University, Melbourne) and a founder of Kinacia, an Australian biotechnology company developing novel diagnostic and therapeutic products aimed at preventing blood clotting. His research interests are focussed in the area of atherothrombosis and cardiovascular disease.



**Karlheinz Peter** heads the Atherothrombosis and Vascular Laboratory in the Baker IDI, Melbourne. His research is highly translational with a strong clinical focus on atherosclerosis, thrombosis and acute plaque rupture. This includes working towards the design of a new class of "intelligent" drugs that will prevent clotting, or dissolve clots that have caused a heart attack or stroke without the excessive bleeding complications that are a feature of currently available drugs. The laboratory is also working towards the identification of biomarkers which will help predict coronary plaque rupture.



**Martin Ng**, a physician-scientist and cardiologist, is currently Senior Staff Specialist in Cardiology at Royal Prince Alfred Hospital, Conjoint Associate Professor of Medicine at the University of Sydney and Head of the Translational Research and Bioengineering Group at the Heart Research Institute. He heads an NHMRC-supported interdisciplinary research group focussed on investigation/development of novel methods for treatment of cardiovascular disease by translational research in vascular biology, vascular physiology and by tissue engineering.



**Harry Lowe** is Head of the Cardiac Catheterisation Laboratories, Concord Repatriation General Hospital, and has been a Staff Cardiologist there since 2002. He is an Associate Professor of Medicine at Sydney University. He completed general and specialty cardiology training at St. Vincent's Hospital, Sydney, a PhD in molecular cardiology at UNSW, and completed his clinical and interventional training at Harvard Medical School and Massachusetts General Hospital, Boston USA. He has a particular research interest in intracoronary imaging and in coronary intervention.



**Andy Yong** is an interventional cardiologist and the Director of Coronary Physiology and Cardiac Measurement at Concord Hospital. He is a conjoint Senior Lecturer at the University of Sydney. He has just returned from an interventional cardiology and postdoctoral research fellowship at Stanford University Medical Center. Dr Yong's research interests include coronary physiology, platelet activation and translation of innovations in interventional cardiology. In his short career, he has published over 30 peer-reviewed publications and over 50 abstracts, and has presented at various international and local meetings.



**Paul Witting** is an Associate Professor in the Discipline of Pathology at The University of Sydney and a career biomedical researcher. His major research interests are in exploring the relationship between oxidative stress and the evolution of tissue damage in the acute setting of stroke and myocardial infarct.



**Alicia Jenkins** is an endocrinologist with clinical and research interest in management of lipids and vascular risk factors, and the prediction, prevention and mechanisms of the vascular complications of diabetes. She trained in medicine in Melbourne and the UK, then in research in Melbourne and USA, before establishing her clinical and research group at Melbourne University. Her research includes biomarker work on major diabetes cohort studies, such as the FIELD study, and on insulin pump therapy. Alicia and her team moved to the NHMRC Clinical Trials Centre last year. She is a Professor of Diabetes and Vascular Medicine.



**Wendy Jessup** co-leads the Atherosclerosis group at ANZAC. She is a biomedical researcher whose main interest is in cellular cholesterol metabolism, particularly mechanisms for export of cholesterol and the role of HDL in this process. **Caroline Reddel, Gabrielle Pennings, Maaïke Kockx, Mathew Traini** are senior postdoctoral scientists in the Atherosclerosis and Vascular Biology groups at ANZAC. **Vincent Chow** is clinical cardiologist who is currently completing his postgraduate studies at ANZAC.