



Annual Scientific Meeting of the Australian Atherosclerosis Society

October 21 – 23, 2015, Fremantle, Western Australia

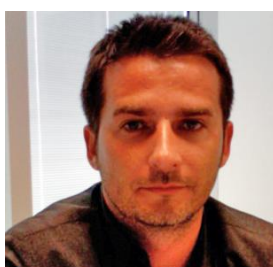
Faculty Member Biographies

International Guest Speakers:

Prof. Bart Staels, Pasteur Institute, Lille, France



Prof. Bart Staels' research focuses on molecular pharmacology of cardiovascular and metabolic diseases, including dyslipidemia and type 2 diabetes. He particularly studies the role of nuclear receptors (such as the PPARs, FXR, Rev-erba and RORa) in the control of inflammation and lipid and glucose homeostasis as well as the transcriptional mechanisms involved. Pr. Staels was among the first to identify a crucial role for the nuclear receptor PPARa in the control of lipid and glucose metabolism as well as cardiovascular function in humans.



Dr Jean-Sébastien Silvestre

From 1999 to 2007, he has been assistant professor at Paris-Diderot University and an honorary member of Institute Universitaire de France. Since 2008, he is research director at Institute Nationale de la Santé et de la Recherche Médicale (Inserm) and head of team 6 'regenerative therapies for cardiac and vascular diseases' at the Paris Cardiovascular Research Center-Inserm UMRS 970 (Paris, France). His central interest lies in cardiovascular physiology and the role of vascular growth and remodelling in ischemic diseases. He has co-authored *more than 100 published* articles deciphering the molecular and cellular mechanisms involved in post-ischemic revascularization and tissue regeneration.



Dr Bhama Ramkhelawon

New York University Langone Medical Center
Postdoctoral Fellow

Bhama's continuous eagerness to learn biological sciences brought her from Mauritius to France, where she obtained her PhD in cardiovascular diseases. She then moved to New York to gain expertise in the field of cardio-metabolic pathologies. During her doctoral and postdoctoral training, Bhama has focused on understanding the molecular mechanisms of vascular remodelling, atherosclerosis and diabetes/obesity. These studies have led to her current research, to investigate the roles of neuronal guidance cues in regulation of the leukocyte trafficking associated with the resolution of inflammation in health and disease. Current projects include understanding the mechanisms regulating netrin-1 expression in macrophages during chronic inflammation observed in conditions including atherosclerosis, type II diabetes, obesity, tuberculosis and osteoporosis. Being a UNESCO/L'OREAL for women in science fellow, Bhama is truly invested in her instrumental role as a mentor to promote science for women.

National Guest Speakers:



A/Prof. Leon Adams

Leon Adams (MBBS, FRACP, PhD) is an Associate Professor in the School of Medicine and Pharmacology, University of Western Australia and Consultant Hepatologist in the Liver Transplant Unit at Sir Charles Gairdner Hospital. His research areas include examining genetic and environmental risk factors for non-alcoholic fatty liver disease (NAFLD) and defining its liver and extra-hepatic complications. He currently leads multiple investigator initiated clinical trials in NAFLD. He has been a research fellow at Mayo Clinic (Rochester, USA) and visiting scholar at the University of California, San Diego.



Dr Katrina Binger

Dr Katrina Binger received her PhD from the Department of Biochemistry and Molecular Biology at the University of Melbourne in 2009. She then studied the contribution of inflammation to diabetic retinopathy at the Department of Immunology at Monash University, prior to commencing a CJ Martin – Overseas Biomedical postdoctoral fellowship in 2011 at the Max-Delbrück Center for Molecular Medicine in Berlin, Germany. Her primary research interests are to understand the contribution of high dietary salt (NaCl) to chronic inflammatory diseases, such as type 2 diabetes. She has shown that the activation of alternatively activated "M2" macrophages is reduced in vitro and in vivo by high salt, and identified a novel molecular mechanism for this effect where high salt reduced the cellular metabolic capacity of the cells. As previous work in the lab has shown that pro-inflammatory "M1" macrophages have an increased activation with high salt, collectively, this work provides evidence where high dietary salt may lead to an overall imbalance in immune homeostasis.



Prof. Alex Bobik

Professor Alex Bobik is an internationally recognised vascular biologist with 40 years of research experience in vascular biology and cardiovascular disease. He published more than 225 original research papers on cardiovascular disease-hypertension, restenosis and atherosclerosis. In 2004, he started working on research theme 'Immunopathogenesis and Therapeutics of Atherosclerosis' with Professor Ban-Hock Toh (Monash University, former Head of Department of Immunology) and Associate Professor Peter Tipping (Monash University), an expert in inflammation. This research work resulted in key papers in atherosclerosis, including papers on NKT cells, B2 cells, B1a cells, regulatory T cells and CD8 T cells in atherosclerosis. The report on role of B2 cells in atherosclerosis showed a paradigm shift on understanding as to how B cells participate in atherosclerosis (*Journal of Immunology*, 2010). Previously it was thought that B cells were protective, but he demonstrated that depletion of B cells reduces atherosclerosis, indicating the presence of a proatherogenic B cell subtype which contributes to atherosclerosis. Later, he showed that B1a cells and regulatory T cells protect against atherosclerosis (*Circulation Research*, 2011). Recently, he has reported a definitive role of CD8 T cells in atherosclerosis proposing their important role in plaque rupture (*Circulation*, 2013). Immunology and cardiovascular disease, mostly atherosclerosis is now the major research theme.



Prof. Peter Clifton

After graduating from Melbourne University with a Bachelor of Medicine/Bachelor Surgery and Bachelor of Medical Science in 1975, Peter Clifton worked in hospitals in Adelaide, London and Melbourne before undertaking a PhD at Flinders University with Professor Philip Barter on the topic "Factors affecting HDL particle size distribution" (awarded 1987). Peter then embarked on a 22-year research career in nutrition with CSIRO's Division of Human Nutrition, where he was the Director Clinical Research Unit from 1994 to 2009. In 2009, he took up the position of Head of Nutritional Interventions at Baker IDI in Adelaide. Peter is an internationally respected leader in the field of cardiovascular disease, nutrition and health. To date in his career he has contributed to informing both the public and health professionals. He has over 250 peer reviewed papers, 12 book chapters and has co-authored 6 books for the public.



Prof. Leonard Kritharides

University of Sydney, Head of the Department of Cardiology and Director of Echocardiography at Concord Repatriation General Hospital, and Professor in Medicine University of Sydney. Particular clinical interests include the primary prevention of coronary disease, the management of complex hyperlipidaemia, cardiac involvement in muscular dystrophy, pulmonary embolism and pulmonary hypertension, and cardiac toxicity after chemotherapy or after psychotropic medications.



Dr Heather Medbury

Dr Medbury is a senior scientist (part time) in the department of Surgery, University of Sydney, Westmead Hospital, NSW. Her main aim is to understand the roles of monocytes and macrophages in wound healing and disease in order to identify pathways that may be manipulated to promote normal tissue healing and homeostasis. In pursuing this understanding, her main focus is atherosclerosis and the contribution of monocytes and macrophages (their different subsets/phenotypes) to plaque development, progression and the occurrence of clinical events.



A/Prof. Peter Meikle

A/Prof Peter Meikle is Head of the Metabolomics Laboratory at Baker IDI Heart and Diabetes Institute and a NHMRC Senior Research Fellow. He is Editor in Chief of Metabolites and holds affiliate positions at the University of Melbourne and the Monash University. The Metabolomics Laboratory has a focus on the dyslipidemia and altered lipid metabolism associated with obesity, diabetes and cardiovascular disease and its relationship to the pathogenesis of these disease states. This work is leading to new approaches to early diagnosis and risk assessment as well as the development of new lipid modulating therapies for chronic disease.



Professor Trevor Mori

Trevor Mori is a Research Professor and NH&MRC Senior Research Fellow in the School of Medicine and Pharmacology at the University of Western Australia. He is a medical research scientist with an interest in nutrition, hypertension, atherosclerosis and cardiovascular disease. His research interests include omega-3 fatty acids in preventing cardiovascular disease; the role of lipid oxidation in atherosclerosis and cardiovascular disease; fatty acid metabolism; resolvins and protectins; platelet and leukocyte function; and control mechanisms in blood pressure regulation. His research has been supported by the US National Institutes of Health, the National Health and Medical Research Council of Australia, the National Heart Foundation of Australia and the Australian Research Council. He has published more than 250 papers and has established numerous international and national research collaborations



Dr Andrew Murphy

Doctor Andrew Murphy is NHMRC Career Development Fellow and National Heart Foundation Future Leader Fellow and Group Leader of the Haematopoiesis and Leukocyte Biology laboratory at the Baker IDI. Dr. Murphy completed his PhD in 2008 in Prof. Jaye Chin-Dusting's laboratory at the Baker IDI and then did a postdoc in Prof. Alan Tall's group at Columbia University. In 2013 he returned to Australia to begin his own group. His work largely focuses on how inflammatory diseases associated with cardiovascular disease cause the overproduction of innate immune cells and how this contributes to atherogenesis. He has published a number of manuscripts in leading journals including *Nature Medicine*, *Cell Stem Cell*, *Cell Metabolism* and *JCI*.



Prof. Stephen Nicholls, M.D.

Stephen Nicholls is Professor of Cardiology at the University of Adelaide and the inaugural SAHMRI Heart Foundation Heart Disease Theme Leader at the South Australian Health & Medical Research Institute. He completed his medical training in Adelaide, cardiology training in Newcastle and a PhD at the Heart Research Institute. He proceeded to the Cleveland Clinic for a postdoctoral fellowship, followed by faculty appointments in the departments of Cardiovascular Medicine and Cell Biology.

He has authored more than 370 book chapters, meeting abstracts and original manuscripts and is a member of the editorial board of the *Journal of the American College of Cardiology*, *ATVB* and the *European Journal of Preventive Cardiology*. His research interests include the atheroprotective properties of HDL, development of new plaque imaging modalities and clinical trials investigating novel anti-atherosclerotic therapies.



Prof. Karlheinz Peter, Baker IDI, Head of Laboratory, Atherothrombosis and Vascular Biology.

His research spans from basic research in vascular biology to clinical trials in cardiology. This includes studies on the cellular mechanisms of coronary artery disease, encompassing the role of platelets, coagulation and inflammation in atherosclerosis, as well as the mechanisms leading to the rupture of atherosclerotic plaques, which is the final event of atherosclerosis, precipitating myocardial infarction or stroke."



Prof. Dmitri Sviridov

Dmitri Sviridov has been working in the field of atherosclerosis and lipoprotein research for 32 years. From 1978 to 1992 he was working in the National Cardiology Research Centre in Moscow. In 1993 he joined the Baker Medical Research Institute and moved to Australia. From 1993 Dmitri worked as a Senior Research Officer in the Laboratory of Lipoproteins and Atherosclerosis; in 1999 he was appointed a NHMRC Senior Research Fellow and from 2001 he has been heading the Laboratory of Lipoproteins and Atherosclerosis in the Baker Heart Research Institute. Dmitri is currently a Professor in the Department of Biochemistry and Molecular Biology, School of Biomedical Sciences, Faculty of Medicine, Nursing and Health Sciences, Monash University, Professor in the School of Medicine and Pharmacology, University of Western Australia and Professorial Fellow in the University of New South Wales. Dmitri is also Professor in the Department of Microbiology, Immunology and Tropical Diseases, George Washington University, Washington, DC, USA



Dr Fatiha Tabet

Fatiha Tabet, BSc, PhD, is a Senior Lecturer and Research Fellow at the School of Medical Sciences at the University of New South Wales and currently the recipient of a National Heart Foundation of Australia Future Leader Fellowship (2014-2018).

Over the past three years, Dr Tabet's research interests focused on understanding how HDL-associated microRNAs regulate HDL function in health and disease. Dr Tabet published peer-reviewed manuscripts and review articles in high impact journals such as *Circulation Research*, *Nature Communications*, *J. Am. Col. Cardiol.*, *PNAS*, *Arterioscler. Thromb. Vasc. Biol.*, *J. Am. Soc. Hypertens.* and *Hypertension*. These publications have attracted over 1900 citations.



Prof. Gerald Watts

Gerald Watts is a graduate of Imperial College, University of London, and received his clinical and research training in the United Kingdom. He is a senior consultant physician, specializing in cardiometabolic medicine, and a Past-President of The Australian Atherosclerosis Society and current Chair of The Familial Hypercholesterolaemia-Australasia Network, as well as Chair of the Scientific Advisory Council of the International FH Foundation. He is Director of the Metabolic Research Centre, Lipid Disorders and Hypertension Clinics and Head of The School of Medicine and Pharmacology Unit (University of Western Australia) and Professor of Cardiometabolic Medicine based at Royal Perth Hospital. Research interests include lipid disorders, obesity and cardiovascular prevention, and clinical interest focuses on delivering improved health care for FH. Professor Watts is actively involved in undergraduate and postgraduate teaching and supervising PhD students and post-doctoral fellows. He has authored over 380 published works and is on the editorial board of *Atherosclerosis*, *Clinical Science*, *Metabolism*, *Practical Diabetes International* and *International Journal of Evidence-Based Healthcare*.

