

BREAKING GROUND. HEALING HEARTS.

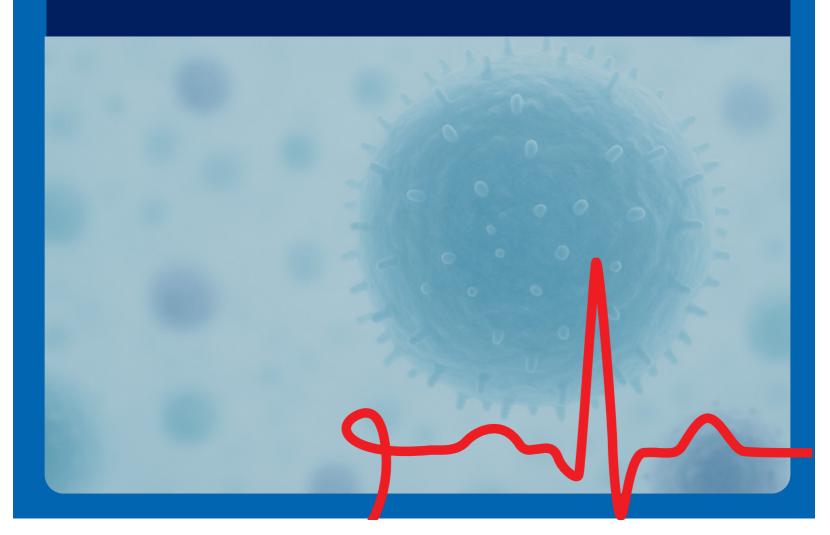




COLLOQUIUM ON CELL-BASED THERAPY FOR ATHEROSCLEROSIS

Thursday 13 November 2025

HLB Mann Judd Ground Floor Auditorium 10 Shelley Street, Sydney NSW 2000



PROGRAM

Time	Session
8:30 – 9:00am	Registration and Barista Tea and Coffee sponsored by HLB Mann Judd
9:00 - 9:15am	Katie Moore
	"Acknowledgement to country"
	Centre Lead, Djurali Centre, Heart Research Institute
	Professor Mathew Vadas
	"Welcome and introduction to the Colloquium"
	Director Science Strategy, Heart Research Institute
9:15 – 9:20am	Aidan Smith
	"Sponsor welcome"
	Head of Not for Profit Partner, HLB Mann Judd
Session I: The Need	
Session Chair: Dr Ashish Misra	
9:20 - 10:20am	Keynote: Professor Edward A Fisher
	"A Surprising Cell therapy for Atherosclerotic Plaques: lessons from weight reduction studies"
	Leon H. Charney Professor of Cardiovascular Medicine, Department of Medicine at NYU Grossman School of Medicine
10:20 – 10:40am	Morning Tea sponsored by HLB Mann Judd
Session II: From bend	ch to bedside – Highlights in preclinical discovery
Session Chair: Associate Professor Mary Kavurma	
10:40 - 11:10am	Dr Ashish Misra
	"Plaque Stability and reprogramming of plaque cells"
	Atherosclerosis and Vascular Remodelling Laboratory Head, Heart Research Institute
11:10 - 11:40am	Dr Maria Jelinic
	"Vascular smooth muscle cell heterogeneity: New insights into coronary artery atherosclerosis"
	Hypertension and Diabetes Research Division Leader Centre for Cardiovascular Biology and Disease Research, La Trobe University
11:40am – 12:10pm	Dr Siân Cartland
	"Restoring MDSC Function: A Cell-Based Strategy to Limit Vascular Inflammation"
	Cardiovascular Immunotherapy Group Leader, Heart Research Institute
12:10 – 12:40pm	Dr Amy Baxter
	"Afterlife in the endothelium: Targeting efferocytosis in vascular diseases"
	Vascular Cell Death, Clearance and Inflammation Laboratory Head, Dying Cell Communication and Clearance Division Leader, Centre for Cardiovascular Biology & Disease Research, La Trobe University
12:40 - 1:40pm	Lunch



Session III: Highlights in clinical research and technological advancements for cell-based therapies **Session Chair: Dr Chris Stanley** 1:40 - 2:25pm **Professor Peter Psaltis** "Tackling atherosclerosis through old and new lenses" Deputy Director of SAHMRI 2:25 - 3:10pm **Professor Xiaowei Wang** "Biomarker-Targeted Imaging and Nanotherapy" Laboratory Head Molecular Imaging and Theranostics, Baker Heart and Diabetes Institute 3:10 - 3:40pm **Associate Professor Jenny Wang** "The potential of CAR-T cell therapy in vascular diseases: Bridging the gap in atherosclerosis treatment" Head of Cancer and Stem Cell Lab, The University of Sydney **Professor Julie McMullen** 3:40 - 3:45pm "Closing Remarks" Deputy Director and Director of Research, Heart Research Institute 4:00pm Post event networking at House Bar, Barangaroo House



SPEAKER BIOS



Professor Edward A Fisher

As a preventive cardiologist at NYU Langone, Professor EA Fisher is dedicated to making a positive impact on patients' lives by focusing on preventing and managing cardiovascular diseases. His philosophy of care revolves around open conversations with patients, fostering trust and rapport to ensure they feel supported and informed throughout their healthcare journey. He specialises in preventive cardiology, with a particular focus on managing major risk factors such as elevated cholesterol, high blood pressure, prediabetes, and diabetes. With extensive training and years of experience, Professor Fisher is committed to providing accurate diagnoses and comprehensive preventive care, which includes medication management, heart-healthy nutrition, and regular exercise programs. Throughout his career. Professor Fisher has been part of NYU Langone's Center for the Prevention of Cardiovascular Disease, a nationally recognised program known for its excellence in patient care and research. His work includes a federally funded program aimed at reversing arterial damage caused by elevated cholesterol levels. This research has provided valuable insights into why certain clinical studies succeed or fail, ultimately enhancing patient care. Professor Fisher's journey into medicine was driven by a desire to make a meaningful difference in the field of cardiovascular health. He was inspired by the opportunity to improve diagnoses and treatments for heart disease, and this passion continues to drive his commitment to patient care. He has been honoured with an award from the National Lipid Association for "extraordinary expertise and contributions to the field of clinical lipidology," reflecting his dedication to quality patient care.



Dr Ashish Misra

Dr Ashish Misra is the Laboratory Head of Atherosclerosis and Vascular Remodelling Laboratory at HRI, Sydney. Ashish was awarded the prestigious Yale Brown-Cox Postdoctoral Fellowship, at Yale Cardiovascular Research Center (YCVRC), Yale University as a Postdoctoral Research Associate (2011-2017).

He established the Atherosclerosis and Vascular Remodelling group at the Heart Research Institute as a recipient of Million-dollar Cardiovascular Research Fellowship. His laboratory utilises advanced cardiovascular genetics techniques to investigate pathophysiology and new treatment options for atherosclerosis and diabetes-induced atherosclerosis.



Dr Siân Cartland

Dr Siân Cartland is Group Leader of the Cardiovascular Immunotherapy Group at the Heart Research Institute, Sydney. She received her PhD in 2012 from the Centre for Vascular Research at the University of New South Wales, following earlier research assistant roles in Sydney and at the University of Oxford, UK.

Her research program investigates how immune cells, particularly myeloid cells, drive vascular inflammation and tissue injury in atherosclerosis and peripheral artery disease (PAD). By integrating molecular, cellular, and immunological approaches, she aims to define the immune mechanisms that regulate vascular repair and chronic inflammation. This knowledge underpins the broader goal of developing targeted immunotherapies to reprogram maladaptive inflammation and restore vascular health.

HEART RESEARCH INSTITUTE



Dr Maria Jelinic

Dr Maria Jelinic is a Senior Lecturer and cardiovascular researcher at La Trobe University, where she leads the "Atheroimmunology" research division within the Centre for Cardiovascular Biology and Disease Research (CCBDR). Since completing her PhD in vascular biology at the University of Melbourne in 2017, Maria has built a dynamic research career on inflammation in cardiovascular disease. More recently, her work has focused on uncovering the immune mechanisms driving atherosclerosis. She was awarded a prestigious Joint National Heart Foundation and NHMRC Early Career Fellowship in 2018 and has since secured over \$3.7M in competitive research funding. Her work has led to 36 peer-reviewed publications (with >1,300 citations), and multiple national and international awards, including the 2024 Ross Hohnen Innovation Award and 2023 ASCEPT Bellberry New Investigator Award, Maria is a member of CAD Frontiers, an international team advancing coronary artery atherosclerosis research and clinical practice. Through this network, she has established key collaborations and a robust research pipeline that integrates single-cell omics, bioinformatics, cell biology, and consumer engagement. Passionate about translational science, Maria's research aims to deliver meaningful outcomes for people living with cardiovascular disease.



Dr Amy Baxter

Dr Amy Baxter is a laboratory head and National Heart Foundation L1 Future Leader Fellow at La Trobe Institute for Molecular Science, La Trobe University, (Melbourne, VIC, Australia). She completed her PhD in 2017 with Prof Mark Hulett within the department of Biochemistry and Chemistry, investigating protein-phospholipid membrane interactions in the anticancer mechanism of host defense peptides. She then received an National Health and Medical Research Council Peter Doherty Early Career Fellowship (2018-2021) which she completed with Prof Ivan Poon, investigating the release of extracellular vesicles from dying cells and their contributions towards disease e.g. autoimmunity, infection and cardiovascular disease. In 2022, Dr Baxter was awarded a La Trobe University Tracey Banivanua Mar Research Fellowship (2022-2025) enabling establishment of the Vascular Cell Death, Clearance & Inflammation group. Her team investigates the mechanisms and functions of apoptotic cell disassembly and clearance (efferocytosis) by vascular cells, using a combination of cell-based and in vivo (zebrafish and mouse) approaches including preclinical models of cardiovascular disease to examine the effects of boosting efferocytosis on tissue repair. Through this work, her team hopes to identify novel therapeutic targets for the treatment of vascular diseases including atherosclerosis, diabetes and stroke. Since 2022, Dr Baxter has also led the 'Dying Cell Communication & Clearance' division of La Trobe's Centre for Cardiovascular Biology & Disease Research. Dr Baxter's research has been acknowledged through several prestigious awards including Australian Society for Biochemistry & Molecular Biology Fred Collins Award (2020), Australasian Cell Death Society Career Development Award (2021), National Heart Foundation Shirley E Freeman Innovation Award (2025) and Australian Vascular Biology Society Achievement and Career Development Award (2025).





Professor Peter Psaltis

Peter Psaltis is an academic interventional cardiologist and vascular biologist, who holds Faculty positions as a Clinical Academic at the University of Adelaide, South Australian Health and Medical Research Institute (SAHMRI) and Central Adelaide Local Health Network (CALHN). He is the Deputy Director of SAHMRI, co-leads its largest research department, the Lifelong Health Theme, and leads its Heart and Vascular Program. He works clinically at the Queen Elizabeth Hospital (TQEH) and Royal Adelaide Hospital (RAH), and is Head of Interventional Cardiology at the latter. Among other leadership positions, Professor Psaltis is a Board Director of the Australian Cardiovascular Alliance and co-Chairs its Coronary Artery Disease Clinical Theme. He is past-president of the Australian Atherosclerosis Society, cochair of the South Australian Aboriginal Heart and Stroke Leadership Group, and an inaugural co-chair of the National Heart Foundation's South Australian Cardiovascular Research Network. Until recently, he served on the Scientific Committee of the Cardiac Society of Australia and New Zealand, and was/is the national lead of the CLEAR Outcomes (Esperion) and SURMOUNT-MMO (Eli Lilly) clinical trials, principal investigator of the completed COCOMO-ACS trial (NHMRC) and co-lead of the ongoing VISION-CAD study (MRFF and THRF). Professor Psaltis has expertise across all three disciplines of basic, translational, and clinical research and leads bench-to-bedside projects dedicated to improving outcomes for patients living with atherosclerotic cardiovascular disease and its complications, especially in the setting of secondary prevention post-myocardial infarction. His research interests span topics of: developmental macrophage and endothelial biology through tissue-resident stem cells; inflammatory regulation of atherosclerosis and its pharmacological modification; coronary plague imaging including through use of non-invasive photon-counting detector coronary computed tomography angiography (PCD CCTA); modelling of biomechanical forces in coronary arteries; and cardiometabolic disease. He currently holds a Level 3 National Heart Foundation Future Leader Fellowship and has received >\$22 million of peer-reviewed grant funding. This includes 4 CIA NHMRC project/ idea grants, one of which received the 2021 Marshall and Warren Award for Innovation. Professor Psaltis has published >200 full-text, peer-reviewed manuscripts and has graduated 13 PhD students (4 as principal supervisor, all Dean's commendation, including one Doctoral Research Medal) and 11 Hons students (all first class).



Professor Xiaowei Wang

Professor Xiaowei Wang heads the Molecular Imaging and NanoTherapeutics Laboratory at the Baker Heart and Diabetes Institute in Melbourne, Australia. She co-leads a Division and co-directs the Centre for Cardiometabolic mRNA Therapy. Professor Wang has authored over 85 publications in high-impact journals such as Circulation, Blood, Circulation Research, and the European Heart Journal. She holds leadership roles as the Immediate Past President of the Federation of Asian Societies for Molecular Imaging and currently serves on the executive boards of the Australian and Global sections. Recently awarded a Strategic Grant for Outstanding Women from the University of Melbourne and recognised among Australia's 40 Under 40 Most Influential Asian-Australians, Professor Wang mentors emerging scientists and champions diversity, purpose, and curiosity in research leadership.





Associate Professor Jenny Wang

Associate Professor Jenny Wang is Head of the Cancer and Stem Cell Laboratory at the University of Sydney (2021-present), and previously led the same lab at UNSW (2013–2021). She is internationally recognised for her expertise in stem cell and blood cancer research. Jenny completed her postdoctoral training at Harvard Medical School and the Harvard Stem Cell Institute (2005–2011), where she published first-author papers in Science and Blood. Her research program investigates mechanisms of therapy resistance and develops innovative targeted treatments, including stem cell therapies, RNA-based interventions, and immunotherapy approaches for blood cancers. Since 2012, Jenny has secured over \$10.6 million in competitive grant funding as CIA from NHMRC, ARC, Cancer Australia, Cancer Council, Cancer Institute NSW, and international organisations. Her work has been published as senior author in leading journals including Cancer Cell, Blood, and Leukemia. Her PhD students and postdocs have received prestigious awards and fellowships in recognition of their research excellence. Currently, her lab focuses on developing nano-RNA and CAR-T cell therapies to overcome drug resistance and eliminate leukemia stem cells, addressing the urgent need for improved outcomes in acute myeloid leukemia, where the 5-year survival rate remains at only 27%.

