

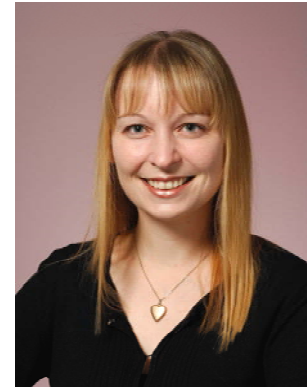


# ACBD

Australian Centre for Blood Diseases

## Supervisor Biographies

**Dr. Simone Schoenwaelder** graduated from Monash University in 1992 with a Bachelor of Science (First Class Honours) and a Ph.D. in haematology in 1996. She spent several postdoctoral years at the University of North Carolina, Chapel Hill (USA) as an NHMRC CJ Martin Fellow studying basic cell biology and signalling. Upon returning to Australia, Simone was awarded NHMRC RD Wright and Monash University Logan Fellowships and conducts research into understanding the signalling enzymes that control haemostasis and thrombosis. She has received numerous awards throughout her career, including a Premiers Award for Medical Research Commendation (1997), Young Australian of the Year in Science and Technology for Victoria (1999), one of three National Finalists in her field for the Young Australian of the Year in 1999, and most recently the ASTH Medal in 2007.



**Dr. Warwick Nesbitt** completed his Ph.D. in 1997 in the Department of Biochemistry at Monash University. He joined the ACBD in 1999 where he has been investigating calcium-signalling mechanisms controlling platelet activation and adhesion processes. This work, published in the *Journal of Cell Biology* and *J. Biological Chemistry* formed the subject of a *Nature* editorial. Dr Nesbitt is currently developing a novel Total Internal Reflection Fluorescence based imaging system as part of a successful Australian Research Council grant to investigate adhesion molecule behaviour within cell-surface contacts.

**Professor Shaun Jackson** (MBBS, B. Med. Sci. Ph.D.) is an NHMRC Principal Research Fellow and faculty member at the prestigious Scripps Research Institute in La Jolla, San Deigo (CA, USA). Prof. Jackson is a co-founder of the ACBD and a founder of Kinacia, an Australian biotechnology company developing novel diagnostic and therapeutic products aimed at preventing blood clotting. Prof. Jackson has received numerous awards in recognition of his research in haemostasis and thrombosis, including the inaugural Premier's Award for Medical Research (1995); the Sylvia and Charles Viertel Clinical Investigators Award; Supervisor of the Year Award (Commendation); an NHMRC R. Douglas Wright Award; the Australian Institute of Political Science 'Tall Poppy' Award; Monash University's Silver Jubilee Research Prize (2001); the Rudolph Virchow Medal for Outstanding Contributions to Thrombosis Research, Würzburg, Germany, and the AMGEN Award from the Australian Society for Medical Research (2005).





**Dr. Justin Hamilton** joined the ACBD in 2005 and is currently a National Heart Foundation Research Fellow. Justin received his Ph.D. from the Department of Pharmacology at The University of Melbourne, where he was awarded the Chancellor's Prize in Medicine for the best Ph.D. thesis of 2001. He then completed a post-doctoral period as an NHMRC CJ Martin Fellow in Prof. Shaun Coughlin's laboratory at the University of California, San Francisco where he studied the role of platelets and platelet thrombin receptors in haemostasis, thrombosis, and inflammatory conditions such as atherosclerosis. At the ACBD, Justin is continuing his work on platelet thrombin receptors in thrombosis. In addition, Justin is using genetic tools to identify other potential targets for the development of new antiplatelet drugs. His work has been published in numerous top-ranking journals including *Nature*, *Circulation Research* and *Blood*.

**Dr. Sue Cranmer** is a senior research fellow in the Platelet and Leukocyte Biology Laboratory. She completed her Ph.D. in 1993 in the Department of Biochemistry, University of Bristol, UK, and has a strong background in haematology research. Her first post-doctoral position was in the Department of Microbiology at Monash in the field of malaria vaccine research. She joined the ACBD in 1996 where she has been investigating the mechanisms which regulate platelet adhesion and thrombus formation under pathological blood flow conditions; studies which aim to identify novel targets for the development of new anti-thrombotic drugs. She has been involved in collaborations with a number of international and national research groups and her work has been published in high-ranking international journals including *Blood* and *the Journal of Biological Chemistry*.



**Dr Sascha Hughan** graduated from Monash University with a combined degree of Bachelor of Arts / Bachelor of Science (First Class Honours). She then completed a PhD at the ACBD, where she investigated the intricate signalling events that trigger platelet activation. Sascha accepted a postdoctoral position with Professor Steve Watson, in the Department of Pharmacology, Oxford University, and then later at the newly established Institute of Biomedical Research, University of Birmingham. During this time, Sascha was awarded a prestigious NHMRC CJ Martin Fellowship. Upon her return to the ACBD in 2005, Sascha has continued her work into platelet activation, specifically focussing on a family of adapter proteins that are playing a novel role in haemostasis and thrombosis. Her work has been published in numerous top-ranking journals including *Nature Medicine*, *Blood* and the *Journal of Biological Chemistry*.

**Dr. Yuping Yuan** has been working in the haemostasis and thrombosis field since the commencement of her PhD in 1990. Her main research focus is on platelet function and regulation, especially platelet adhesion and signaling. Yuping has had a productive postdoctoral period and she was awarded the prestigious John Shaw Fellowship (the top ranked fellow) by the National Heart Foundation in 1998. She also successfully obtained a NHMRC grant as a Chief Investigator in 2004. Her current ongoing research work focuses on platelet adhesion receptor signaling mechanisms and also the functional interplay between haemostasis/thrombosis, coagulation and inflammation.



**Associate Professor Robert Medcalf** was awarded his Ph.D. from the University of Melbourne in 1984. His first post-doctoral appointment was at the University of Melbourne where he researched the role of the plasminogen activating system in rheumatoid arthritis. In 1986, he was invited to Lausanne, Switzerland where he extended his interest in the field of plasminogen activation and fibrinolysis. In 1993, he returned to Australia and was awarded a R.D Wright Fellowship at Monash University. His research into the field of fibrinolysis expanded into post transcriptional gene regulation and neurobiology. He was awarded the Monash University Faculty of Medicine “Silver Jubilee Prize for Medical Research” in 2003 and the 2005 Vice Chancellor’s Award for Student Supervision” (Special Commendation). He was appointed to the NH&MRC Fellowship Scheme in 2003, and was elected as Chairman of the International Society on Fibrinolysis and Proteolysis in 2004. He is also Associate Editor of the Journal of Thrombosis and Haemostasis.



**Dr. Stan Stasinopoulos** was awarded his Ph.D. in molecular microbiology from LaTrobe University in 1998. He continued his interest in molecular microbiology during his post-doctoral period at the Mount Sinai School of Medicine, New York University where he investigated post-transcriptional regulation of gene expression in the bacterium *Bacillus Subtilis*. He joined the ACBD in 2001 and has been investigating post-transcriptional mechanisms that regulate the expression of the Plasminogen Activator Inhibitor type 2 and prothrombin genes.

**Dr. Andre Samson** has been in the laboratory of Associate Prof. Robert Medcalf since 2000. He has recently finished his Ph.D. Andre was responsible for establishing and characterizing the culturing of embryonic mouse neurons at the ACBD. His work is focused on understanding how the blood-borne serine protease, t-PA, participates in central nervous system function and dysfunction. More specifically, his research investigates broadly the aetiology of diseases such as ischaemic stroke as well as the molecular mechanisms of learning and memory formation.



**Ms Maithili Sashindranath** has recently completed a Ph.D. in Neuroscience from the University of Melbourne. Her research has focussed on the role of oxidative stress and protein kinase signalling in seizure-induced neurodegeneration in a mouse model of temporal lobe epilepsy. At the ACBD, she is investigating the role of tissue-type plasminogen activator (t-PA) in traumatic brain injury (TBI). Her work is focussed on elucidating the mechanisms by which t-PA exacerbates secondary damage following TBI using an established mouse model.

**Clinical Associate Professor Paul Coughlin** is a haematologist who graduated from Monash University in 1982 with dual First Class Honours in Medicine and Medical Science. He completed postgraduate training in haematology and pathology in 1991 and completed his Ph.D. in 1995. A/Prof. Coughlin's research interest in haemostasis and thrombosis extends from the bench to the bedside. He has been a Wellcome Senior Research Fellow (Monash University, 2000-2004) and CJ Martin Fellow (University of Cambridge, 1995-1999) and is a Secretary of the Australasian Society of Thrombosis and Haemostasis and Associate Editor of the journal *Thrombosis Research*.



**Dr Anita Horvath** is a postdoctoral research fellow in the laboratory of A/Prof. Paul Coughlin. She is investigating the structural and functional interactions of proteases and their inhibitors, serpins. Her work is focused on examining how ligands interact with serpins and proteases and how this can modulate serpin-protease function. She is also involved in collaborations with structural biologists at Department of Biochemistry and Molecular Biology, Monash University, and through this work solved the high resolution crystal structure of mouse antichymotrypsin.

**Assoc. Prof. Andrew Spencer** is the Head of Malignant Haematology and Stem Cell Transplantation and also leads the Myeloma Research Group at the Alfred Hospital. He is an Assoc. Prof. in the Department of Medicine, Monash University and is actively involved in both translational and clinical research with a particular interest in drug resistance mechanisms, murine tumour models of multiple myeloma and novel therapeutic approaches for multiple myeloma. He is Chairman of the Australasian Leukaemia and Lymphoma Group (ALLG), is Chair of the ALLG Myeloma Disease Subcommittee and is the Victorian Councillor of the Haematology Society of Australia and New Zealand (HSANZ). He is presently a member of the Scientific Advisory Board of the International Myeloma Foundation (IMF) and a member of the International Myeloma Working Group (IMWG). He has acted as principal investigator for numerous multi-centre clinical trials in both myeloma and non-Hodgkin's lymphoma and has extensive experience working as an advisor to the pharmaceutical industry with a particular emphasis on novel drug development.



**Dr. Tiffany Khong** received her PhD from the Department of Clinical Immunology, St. Vincent's Hospital, University of Melbourne in 1999. She accepted a postdoctoral position with Professor William Louis at the Department of Clinical Pharmacology, Austin Hospital where she studied a novel compound against imidazoline found abundant in brain specimens from patients with Alzheimer's Disease. In 2004, she joined Myeloma Research Group and has been investigating novel chemotherapeutic drugs for the treatment of multiple myeloma. Her research in a DNA methyltransferase inhibitor resulted in the commencement of a Phase II 'proof of concept' trial which began in early 2007 in relapsed/refractory myeloma patients.

**Dr Robert Andrews** is an NHMRC Senior Research Fellow at the Department of Immunology, Monash University, located at the Australian Centre for Blood Diseases, at the Alfred Medical Research & Education Precinct (AMREP), Melbourne. Recent research has involved the structure-activity relationships of platelet adhesion receptors initiating patho/physiological thrombus formation relevant to heart attack and stroke. Two co-authored patents involve an anti-inflammatory/anti-thrombotic snake venom metalloproteinase-disintegrin, and monoclonal antibodies that selectively inhibit shear-dependent thrombus formation. Teaching includes undergraduate lecturing in Cell Biology (2002-2008), post-graduate supervision, and serving on examiner's panels. He is also a member of the Faculty Research Committee in 2008, Chaired the Monash University Early Career Development award panel (2005-2007), and currently serves on the Editorial Board of Thrombosis Research, and Editorial Advisory Boards for Cardiovascular & Hematological Agents in Medicinal Chemistry, and the Journal of Thrombosis and Haemostasis



**Dr Elizabeth Gardiner** joined the Vascular Biology group in 1999 after completing almost 5 years postdoctoral research at the Cleveland Clinic Foundation, Cleveland Ohio, USA in Dr Ed Plow's research group. During this time she was awarded an American Heart Association Fellowship to study adhesion mechanisms allowing platelets to directly associate with leukocytes and endothelial cells. This work was published in a series of papers in the Journal of Biological Chemistry. Since returning to Australia she has identified several mechanisms which allow platelets to autoregulate (proteolytically shed) the principal receptors important for platelet activation, adhesion and aggregation; events that are pivotal to the formation of a thrombus. This work has been published in Blood and

The Journal of Thrombosis and Haemostasis and has directly lead to the identification of molecular pathways occurring in patients with thrombocytopenias.

**Dr Jane Arthur** was awarded a PhD in Physiology from the University of Melbourne in 1995. She completed postdoctoral training in the laboratory of Prof Joe Sambrook at the Peter MacCallum Cancer Institute before moving to the Cellular Biochemistry laboratory at the Baker Heart Institute and establishing a strong research interest in mechanisms of cardiovascular disease. Her work has been published in high quality journals including Circulation Research and the Journal of Biological Chemistry. In 2003, she joined the Vascular Biology group, now based within the ACBD on the AMREP site. Her research now focuses on mechanisms of platelet activation leading to platelet receptor shedding (recently published in Blood, the Journal of Biological Chemistry and Thrombosis and Haemostasis). She is currently examining the generation and impact of reactive oxygen species in platelet activation/function. Information about these mechanisms will lead to new avenues of therapy and clinical modulation of platelet thrombus formation.

