




MAM 2024 18-22 Lorne FEB Victoria Australia

Molecular Approaches to Malaria

MAM 2024 Conference 18-22 February 2024 Mantra Lorne, Victoria		
Sunday 18 February		
1400-1800	Registration opens	Convention Centre Foyer
1400-1530	Arrival of attendees	
1430-1800	Prayer room opens	The Observatory
1430-1930	Nursing room opens	Heritage 2
1430-1930	Family room opens	Heritage 3
		
1500-1730	Speakers room opens	Boardroom 1
1600-1740	Live streaming of the plenary at the Family Room and Heritage Ballroom	Heritage 3 Heritage Ballroom
Opening Plenary <i>Chairs: Assoc Prof Chris Tonkin, Assoc Prof Michelle Boyle</i>		Convention Centre
1600-1610	Welcome by the Committee	
1610-1640	Welcome to Country & Traditional Dance	
1640-1740	Plenary Presentation Jean-Luc Bodmer, Bill & Melinda Gates Foundation, USA <i>New Tools and Strategies for Malaria Elimination</i>	
1740-1750	Professor Julian Rayner, University of Cambridge, UK Tribute to Dominic Kwiatkowski	
1800-1930	Welcome Reception	 QIMR Berghofer Medical Research Institute
		Seagrass Lawns

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Monday 19 February		
0700-0745	Morning Run	Mantra Lobby
0800-1800 1915-2030	Registration opens	Convention Centre Foyer
0800-1830	Speakers room opens	Boardroom 1
0830-1500	Exhibition Opens	Conference Centre Foyer
0830-2000	Prayer room opens	The Observatory
0830-2000	Nursing room opens	Heritage 2
0830-2000	Family room opens	Heritage 3
		
0745-0840	Breakfast Workshop for Early Career Researchers	Heritage Ballroom
		
0845- 1820	Live streaming of the plenary at the Family Room and Heritage Ballroom	Heritage 3 Heritage Ballroom
Life Cycle Biology - pre-Erythrocytic <i>Chairs: Professor Geoff McFadden, Dr Scott Lindner</i>		Convention Centre
		
0845-0910	Keynote Presentation Photini Sinnis, Johns Hopkins University, USA <i>When is an infected mosquito an infectious mosquito?</i>	
0910-0935	Keynote Presentation Friedrich Frischknecht, Heidelberg University, Germany <i>A new look at parasite formation in mosquito stages</i>	
0935-0950	Hardik Patel, Seattle Children's Research Institute Elimination of intra-hepatocytic malaria parasites requires GABARAPs, reactive oxygen species and lysosomal fusion but not nitric oxide production	
0950-0955	<i>Mini break</i>	
0955-1020	Keynote Presentation Liliana Mancio-Silva, Institute Pasteur, France <i>Unveiling the biology of Plasmodium vivax hypnozoites with single-cell transcriptomics</i>	
1020-1035	Lauren Carruthers, University of Glasgow Characterisation of the Apicomplexa-specific zinc-finger protein (ZINGER) family in <i>Plasmodium</i> and identification of their RNA-targets and protein interactome	
1035-1050	Abhinay Ramaprasad, Francis Crick Institute SHIFTiKO – A scalable inducible gene knockout system for <i>Plasmodium falciparum</i>	
1050-1120	<i>Morning Refreshments + Exhibition Viewing</i>	 Convention Centre Foyer
Molecular Epidemiology & Population genetics <i>Chairs: Professor Alyssa Barry, Dr Katherine O'Flaherty</i>		Convention Centre
1120-1145	Keynote Presentation Isabella Oyier, KEMRI Wellcome Trust, Kenya <i>Integrating malaria molecular epidemiology into routine surveillance</i>	
1145-1200	Alexander Waiganjo Macharia, KEMRI-Wellcome Trust Research Programme Impact of β -thalassaemia on <i>Plasmodium falciparum</i> red cell invasion and development: insights from a recall-by-genotype study conducted in Kilifi, Kenya	

1200-1215	Amy Ibrahim, London School of Hygiene & Tropical Medicine Genome to function: Global analysis of <i>P. malariae</i> WGS hints at pyrimethamine resistance, validated using ortholog replacement in <i>P. knowlesi</i> .	
1215-1220	<i>Mini Break</i>	
1220-1600	Even number posters to be affixed for today's poster session	Marquee @ The D Greens
1220-1245	Keynote Presentation Sarah Auburn, Menzies School of Health Research, Australia <i>Genetic reconstruction of Plasmodium vivax lineages: insights on parasite biology and epidemiology</i>	
1245-1300	Yannick Höppner, Bernhard-Nocht Institute for Tropical Medicine Antigenic variation of malaria parasites counteracts the host immune system	
1300-1325	Keynote Presentation Nguyen Thanh Thuy Nhien, Oxford University Clinical Research Unit, Vietnam <i>Genetic surveillance of Plasmodium parasites to support National Malaria Control Program</i>	
	 Science Translational Medicine AAAS	
1325-1430	<i>Lunch + Exhibition Viewing</i>	 menzies school of health research
		Convention Centre Foyer
1430-1600	Free time	
	Life Cycle Biology - Blood stage – 1 <i>Chairs: Professor Alan Cowman, Dr Hayley Bullen</i>	Convention Centre
1600-1625	Keynote Presentation Yi-Wei Chang, University of Pennsylvania, USA <i>In situ structural study of the rhoptry secretion system</i>	
1625-1650	Keynote Presentation Kirk Deitsch, Cornell University, USA <i>The mechanisms underlying coordinated gene activation and silencing for antigenic variation by Plasmodium falciparum</i>	
1650-1705	Emma Jones, University of Cambridge A study of <i>Plasmodium falciparum</i> merozoite-erythrocyte attachment using optical tweezers and microfluidics sheds new light on molecular interaction of invasion	
1705-1720	Danny Wilson, The University of Adelaide Cross species importance and functional characterisation of merozoite surface proteins	
1720-1725	<i>Mini break</i>	
1725-1750	Keynote Presentation Ross Waller, University of Cambridge, UK <i>Resolving the spatial proteome of Plasmodium falciparum asexual stages and their interaction with the erythrocyte</i>	
1750-1805	Vasant Muralidharan, University of Georgia <i>Plasmodium</i> merozoites require two rhoptries for erythrocyte invasion	
1805-1820	Tobias Spielmann, Bernhard Nocht Institute for Tropical Medicine A system to study switching, binding, trafficking and interactors of the major <i>P. falciparum</i> virulence factor PfEMP1	
1820-1945	<i>Nightly Dinner (Ticketed)</i>	Seagrass Lawns

	Flash Talks A <i>Chairs: Dr Rhea Longley, Dr Emma McHugh</i>	Convention Centre
1945-2030	<p>Luzia Bukali, QIMR Berghofer Medical Research Institute Assessing the immunomodulatory potential of Ruxolitinib during controlled human malaria infection</p> <p>Sophia DonVito, London School of Hygiene & Tropical Medicine The role of reticulocyte binding-like (RBL) and Duffy binding-like (DBL) proteins in host cell tropism during erythrocyte invasion.</p> <p>Esrah Du, Harvard T. H. Chan School of Public Health Are you sleeping? Understanding mechanisms of <i>Plasmodium falciparum</i> oocyst dormancy in response to stress</p> <p>Célia Garcia, Faculdade de Ciências Farmacêuticas da Universidade de São Paulo - FCF/USP The genetically encoded calcium indicator GCaMP3 reveals spontaneous calcium oscillations at asexual stages of the human malaria parasite <i>Plasmodium falciparum</i></p> <p>Matt Govendir, EMBL Barcelona A sticky situation: the influence of microvessel mechanics on cerebral malaria pathogenesis</p> <p>Dulcie Lautu-Gumal, Burnet Institute Proliferation and spread of <i>Plasmodium falciparum</i> kelch13 C580Y mutations in parasite populations on the north coast of Papua New Guinea</p> <p>Benjamin Seager, Walter and Eliza Hall Institute A conserved molecular mechanism of erythrocyte invasion by malaria parasites</p> <p>Ghizal Siddiqui, Monash University Artemisinin-resistant Kelch13 mutations are associated with reduced drug activation and enhanced antioxidant capacity, which can be targeted to overcome resistance</p> <p>Edwin Sutanto, Exeins Health Initiative Deconvolving genetic complexity in <i>Plasmodium vivax</i> infections</p> <p>Joseph Visone, Weill Cornell Medicine Identification of a key regulatory mechanism influencing var switching and antigenic variation in <i>Plasmodium falciparum</i></p> <p>Mary-Louise Wilde, University of Melbourne Development of gene drives to directly target malaria parasites</p>	
2030-2200	Poster Viewing 	Marquee @ The D Greens

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Seeing beyond

Tuesday 20 February		
0700-0745	Morning Run	Mantra Lobby
0800-0900	Even number posters to be removed	Marquee @ The D Greens
0830-1800 1915-2030	Registration opens	Convention Centre Foyer
0815-1830	Speakers room opens	Boardroom 1
0830-1500	Exhibition opens	Convention Centre Foyer
0830-1930	Prayer room opens	The Observatory
0830-1930	Nursing room opens	Heritage 2
0830-1930	Family room opens	Heritage 3
		
0845-1810	Live streaming of the plenary at the Family Room and Heritage Ballroom	Heritage 3 Heritage Ballroom
Drug Development and Resistance – 1 <i>Chairs: Assoc Prof Darren Creek, Dr Adele Lehane</i>		Convention Centre
0845-0910	Keynote Presentation Susan Wyllie, University of Dundee, UK <i>The Direct Approach: The Role of Chemical Proteomics in Anti-malarial Target Deconvolution</i>	 
0910-0925	Deusdedith Rwegasira Simon Ishengoma, National Institute for Medical Research Confirmed artemisinin partial resistance but high efficacy of artemether-lumefantrine and artesunate-amodiaquine in North-western Tanzania	
0925-0940	Belen Tornesi, Medicine for Malaria Venture Malaria in 2024: triple combinations of antimalarials. How do we get there?	
0940-0945	<i>Mini Break</i>	
0945-1010	Keynote Presentation Kelly Chibale, University of Cape Town, South Africa <i>Targeting Plasmodium kinases and haemozoin formation with dual inhibitors</i>	 
1010-1025	Ashley Vaughan, Seattle Children's Research Institute Novel <i>Plasmodium falciparum</i> genetic crosses reveal the complexity of drug resistance evolution and life cycle maintenance	
1025-1055	<i>Morning Refreshments + Exhibition Viewing</i>	 Convention Centre Foyer
Immunity <i>Chairs: Professor Chris Engwerda, Dr Lynette Beattie</i>		Convention Centre
1055-1120	Keynote Presentation Gemma Moncunill, Barcelona Institute for Global Health, Spain <i>Beyond antibodies: cellular and transcriptional responses in RTS,S vaccinated children</i>	
1120-1145	Keynote Presentation Noah Butler, The University of Iowa, USA <i>Metabolic regulation of anti-malarial immunity</i>	
1145-1200	Brendan McMorran, Australian National University The rapid and selective digest vacuole lysis activity of an anti-plasmodial peptide derived from a human host defence protein.	
1200-1215	Lynette Beattie, University of Melbourne Gamm Delta T cell-derived IL-4 promotes immunity to liver-stage malaria	
1215-1220	<i>Mini break</i>	

1220-1235	Gonzalo Acevedo, University of California, San Francisco Pre-erythrocytic immunity beyond the sporozoite: CD4 ⁺ T cell responses against liver stage <i>P. falciparum</i> antigens in Ugandan children	
1235-1300	Keynote Presentation Hedda Wardemann, German Cancer Research Institute, Heidelberg, Germany <i>The human adaptive immune response to Plasmodium falciparum circumsporozoite protein</i>	
1300-1315	Wiebke Nahrendorf, University of Edinburgh <i>Plasmodium vivax</i> rapidly induces species-specific clinical immunity	
1315-1430	Drug Discovery Workshop John A. McCauley, MSD	 Heritage Ballroom
1315-1430	Lunch + Exhibition Viewing	 Convention Centre Foyer
1430-1600	Free Time Odd number posters to be affixed for today's poster session	Marquee @ The D Greens
Life Cycle Biology – Sexual Development Chairs: Professor Andy Waters, Dr Claire Sayers		Convention Centre
1600-1625	Keynote Presentation Rita Tewari, University of Nottingham, UK <i>Divide et Impera: How Plasmodium divergent kinases rule cell division?</i>	
1625-1640	Oliver Billker, Umeå University Fertility screens identify genes essential for <i>Plasmodium</i> transmission to mosquitoes and reveal conserved aspects of sex in a divergent eukaryote	
1640-1655	Danushka Marapana, Walter and Eliza Hall Institute An E3 ubiquitin ligase complex regulates stage transition in human malaria parasites	
1655-1710	Michaela Petter, University Hospital Erlangen The <i>P. falciparum</i> bromodomain protein PfBDP1 plays an essential role in regulating the transcriptional program of gametocytes	
1710-1715	Mini Break	
1715-1740	Keynote Presentation Bjorn Kafsack, Cornell University, USA <i>The Alpha and Omega of HDP1 function during gametocyte development</i>	
1740-1755	Gigliola Zanghi, Center for Global Infectious Disease Research Global gene expression of human malaria parasite throughout intrahepatocytic development	
1755-1810	Scott Lindner, Pennsylvania State University Global release of translational repression across <i>Plasmodium's</i> host-to-vector transmission event	
1810-1930	Nightly Dinner (Ticketed)	Seagrass Lawns
Flash Talks B Chairs: Dr Ghizal Siddiqui, Dr Madeline Dans		Convention Centre
1930-2015	Bridget Barber, QIMR Berghofer Medical Research Institute Ruxolitinib adjunctive treatment to reduce inflammatory responses in malaria: a randomised placebo controlled trial in volunteers infected with <i>P. falciparum</i> Thorey Kolbrun Jonsdottir, Umeå University, The Laboratory for Molecular Infection Medicine Sweden (MIMS) High-throughput gene editing system enables CRISPR screens in <i>Plasmodium berghei</i>	

	<p>Michal Kucharski, Nanyang Technological University STR polymorphism in the promoter region of cyclophilin 19B drives its transcriptional upregulation contributing to drug resistance in <i>Plasmodium falciparum</i></p> <p>Prasun Kundu, Cambridge Institute for Medical Research Systematic reverse vaccinology screening for novel <i>Plasmodium vivax</i> blood-stage vaccine antigens</p> <p>Marcus Lee, University of Dundee AReBar: an Antimalarial Resistome Barcode assay for target deconvolution</p> <p>Frankie Lyons, Walter and Eliza Hall Institute Nanobodies targeting malaria transmission-blocking candidate</p> <p>Kioko Mwikali, KEMRI-Wellcome Trust Research Programme The mRNA content of peripheral blood extracellular vesicles provides a window into cerebral malaria disease progression</p> <p>Herbert Opi, Burnet Institute Identification of targets of protective antibody responses against <i>Plasmodium vivax</i> malaria using a multifunctional antibody profiling approach</p> <p>Cecilia Rios Teran, The University of Melbourne Longitudinal analysis of the prevalence of minor <i>Plasmodium</i> spp. infecting humans through sequential IRS and SMC interventions in northern Ghana</p> <p>Julie Verhoef, Radboud University Medical Center Mitochondrial division in human malaria parasites</p>	
2015-2145	<p>Poster Viewing</p> 	<p>Marquee @ The D Greens</p>

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Wednesday 21 February		
0700-0745	Morning Run	Mantra Lobby
0800-0900	Odd number posters to be removed	Marquee @ The D Greens
0800-1730	Registrations opens	Convention Centre Foyer
0800-1730	Speakers room opens	Boardroom 1
0830-1430	Exhibition opens	Convention Centre Foyer
0815-1930	Prayer room opens	The Observatory
0815-1930	Nursing room opens	Heritage 2
0815-1930	Family room opens	Heritage 3
		
0830-1615	Live streaming of the plenary at the Family Room and Heritage Ballroom	Heritage 3 Heritage Ballroom
Lifecycle Biology – Transmission <i>Chairs: Professor Till Voss, Professor Matthias Marti</i>		 Convention Centre
0830-0855	Keynote Presentation Flaminia Catteruccia, Harvard University, USA <i>Stopping the real killer: How to block Plasmodium transmission by Anopheles mosquitoes</i>	
0855-0910	Magellan Tchouakui, Centre for Research in Infectious Diseases The duplicated pyrethroid-resistance genes CY6P9a/b are negatively associated with chlorfenapyr resistance supporting the high efficacy of interceptor-G2 against pyrethroid-resistant mosquitoes	
0910-0925	Benjamin Liffner, Indiana University School of Medicine Visualising development of malaria parasites in the mosquito	
0925-0940	Lauriane Sollelis, University of Zurich Natural selection on transmission investment is associated with Artemisinin resistance in <i>Plasmodium falciparum</i>	
0940-0945	<i>Mini Break</i>	
0945-1000	Fiona Angrisano, Burnet Institute Identification of novel malaria anti-gametocyte transmission blocking vaccine targets	
1000-1015	Matthias Rottmann, Swiss Tropical And Public Health Institute An all-in-one pipeline for the in vitro discovery and in vivo evaluation of <i>Plasmodium falciparum</i> malaria transmission blocking drug candidates	
1015-1030	Sophie Collier, The University of Melbourne Locked Out and Left Behind: A Study of Organellar Inheritance in <i>Plasmodium berghei</i>	
1030-1100	<i>Morning Refreshments + Exhibition Viewing</i>	Convention Centre Foyer
Vaccine Design <i>Chairs: Professor Ian Cockburn, Dr Stephen Scally</i>		Convention Centre
1100-1125	Keynote Presentation Matthew Higgins, University of Oxford, UK <i>Molecular mechanisms of severe malaria</i>	
		 

1125-1150	Keynote Presentation Azza Idris, National Institutes of Health, Ragon Institute at Mass General, MIT, Harvard, Mass General for Children, USA <i>Monoclonal antibodies: harnessing the power of passive immunity in the fight against malaria</i>	 Australian National University  The John Curtin School of Medical Research
1150-1155	<i>Mini break</i>	
1155-1210	Liriye Kurtovic, Burnet Institute Protective antibody mechanisms induced by the RTS,S malaria vaccine in a pediatric phase IIb clinical trial	
1210-1225	Danielle Stanisc, Institute for Glycomics, Griffith University Evaluating the immunogenicity and protective efficacy of a chemically attenuated whole parasite <i>Plasmodium falciparum</i> blood-stage malaria vaccine in malaria-naïve volunteers	
1225-1240	Krishanpal Karmodiya, Indian Institute of Science Education & Research, Pune Multi-protein chimeric antigens, a novel combined approach for efficiently targeting and blocking the blood Stage of <i>Plasmodium falciparum</i>	
1240-1300	Keynote Presentation Justin Boddey, Walter and Eliza Hall Institute, Australia <i>Novel antimalarials targeting the late liver stage confer sterile immunity to malaria</i>	
1300-1410	Introduction to molecular surveillance for malaria control: From the laboratory scientist to the decision-maker A/Prof Sarah Auburn - Menzies Institute for Health Research Prof. Alyssa Barry - Deakin University and Burnet Institute Dr. Deus Ishengoma - National Institute for Medical Research A/Prof. Isabella Oyier - Kenya Institute for Medical Research Dr. Nguyen Thanh Thuy Nhien – Oxford University Clinical Research Unit Dr. Estee Torok, Senior Program Officer, Global Health, Bill and Melinda Gates Foundation	
		Heritage Ballroom
1300-1410	<i>Lunch</i>	Convention Centre Foyer
Pathogenesis <i>Chairs: Professor Nicholas Anstey, Dr Maria Bernabeu</i>		Convention Centre
1410-1435	Keynote Presentation Ana Rodriguez, New York University, USA <i>Mechanisms of malaria pathogenesis: anemia and cerebral malaria</i>	
1435-1450	Hannah Fleckenstein, EMBL Barcelona Targeted volume electron microscopy of <i>P. falciparum</i> iRBC - endothelial interactions in a 3D blood brain barrier model	
1450-1505	Tracey Lamb, University of Utah Pathogenic CD8 ⁺ T cells in malaria have low affinity T cell receptors	
1505-1530	Keynote Presentation Steven Kho, Menzies School of Health Research, Australia <i>Hidden Splenic Reservoirs of Plasmodium vivax and Plasmodium falciparum</i>	
1530-1545	Nathan Schmidt, Indiana University School of Medicine Gut bacteria have the potential to cause susceptibility to severe malaria in African children	
1545-1600	Lauren Galloway, University of Glasgow A hidden biomass of <i>P. falciparum</i> parasites in the spleen of paediatric severe malaria cases?	

1600-1615	Rhea Longley, Walter and Eliza Hall Institute <i>Plasmodium vivax</i> serological exposure markers to uncover hidden malaria infections		
1615-1900	<i>Free Time</i>		
1900-1930	<i>Pre-Dinner Drinks</i>	 University of the Sunshine Coast Australia	Clinical Trials
1930-2330	Conference Dinner <i>(Registration required)</i>		
		Convention Centre	

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Thursday 22 February		
1000-1300	Registration opens	Conference Centre Foyer
1000-1030	Morning tea	Conference Centre Foyer
1000-1300	Prayer room opens	The Observatory
1000-1300	Nursing room opens	Heritage 2
1000-1300	Family room opens	Heritage 3
		
1030-1130	Live streaming of the plenary at the Family Room and Heritage Ballroom	Heritage 3 Heritage Ballroom
Closing Remarks and Awards Ceremony <i>Chairs: Dr Matt Dixon, Professor Denise Doolan</i>		Convention Centre
1030-1130	MAM2024 Wrap-up - Closing remarks - Awards ceremony	
1130-1300	Lunch	Conference Foyer
1300-1330	Departure to Melbourne Airport	Mantra Foyer
1330	Departure to WEHI	

The MAM 2024 Conference reserves the right to amend or alter any advertised details relating to dates, program and speakers if necessary and without notice, as a result of circumstances beyond their control. All attempts will be made to keep any changes to an absolute minimum.

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