



Symposium Program

(subject to change)

Sunday 24th August

4.00pm

Student Social Networking Function

Games Room, RACV Torquay Resort

5.00pm – 7.00pm

Symposium Registration and Welcome Reception

Great Ocean Road Foyer



Monday 25th August

Symposium Registration

8.00am

Great Ocean Road Foyer, RACV Torquay Resort

8.30am- 10.00am	
Session 1 – Opening Great Ocean Road Ballroom <i>Chair: Jonathan Darbro</i>	
8.30am – 8.40am	President Welcome and Conference Opening <i>Jonathan Darbro, President, Mosquito Control Association of Australia (MCAA)</i>
8.40am – 8.45am	Acknowledgement to Country
8.45am – 9.00am	Welcome from Victoria Health <i>Dr Caroline McElnay, Chief Health Officer, Department of Health, Victoria</i> <i>Dr Christian McGrath, Deputy Chief Health Officer, Communicable Disease, Department of Health, Victoria</i>
9.00am – 9.30am	Keynote Address Arthropod-borne diseases in the tropical north of Australia: the known unknowns bite back <i>Bart Currie, Menzies School of Health Research and Royal Darwin Hospital</i>
9.30am – 10.00am	Keynote Address A review of <i>Aedes albopictus</i> control in Mercer County, New Jersey, USA <i>Nicholas Indelicato, Mercer County Mosquito Control Unit</i>
10.00am - 10.30am	
Morning Tea	
10.30am– 12.00pm	
Session 2 – National Arbovirus Surveillance and Mosquito Control Roundup Great Ocean Road Ballroom <i>Chair: Jessica Harrison</i>	
10.30am -10.45am	Declining mosquito abundance, increasing mosquito-borne diseases over the 2023/24 and 2024/25 seasons <i>Peter Neville, Department of Health Victoria</i>
10.45am – 11.00am	2023/24 and 2024/25 Northern Territory seasons: Mosquito and mosquito borne disease update <i>Allan Warchot, Medical Entomology, Northern Territory Health</i>
11.00am – 11.15am	Arbovirus surveillance and mosquito borne diseases in Queensland: 2023/2024 - 2024/2025 <i>Cassie Jansen, Health Protection And Regulation Branch, Queensland Department Of Health</i>

11.15am – 11.30am	Tracking arbovirus activity in NSW: Challenges and emerging risks Suhasini Sumithra, NSW Health
11.30am – 11.45am	Arbovirus and mosquito surveillance in South Australia 2023-2024 & 2024-2025 Brad Mackintosh, SA Health
11.45am – 12.00pm	Arbovirus and mosquito surveillance in Western Australia: 2023/24 – 2024/25 Jay Nicholson, Department of Health
12.00pm – 1.00pm Lunch	
1.00pm – 2.24pm	Session 3 – Challenges and Solutions for Mosquito Management (I) Great Ocean Road Ballroom Chair: Weng Chow  SUMITOMO CHEMICAL 
1.00pm – 1.12pm	A survey of action threshold use in Australian mosquito control programs Jonathan Darbro, Metro North Public Health Unit
1.12pm – 1.24pm	Biorational larvicides and their potential impacts on Australian stingless bees Brian Johnson, QIMR Berghofer
1.24pm – 1.36pm	Morphological identification of four Australian species in <i>Culex pipiens</i> complex Jyotika Taneja De Bruyne, Agriculture Victoria Research, Agribio Centre
1.36pm – 1.48pm	Will <i>Wolbachia</i> -based mosquito control survive climate change? Perran Ross, The University of Melbourne
1.48pm – 2.00pm	Modelling <i>Aedes albopictus</i> management, incorporating immigration and bidirectional <i>Wolbachia</i> interactions Roslyn Hickson, CSIRO
2.00pm – 2.12pm	Mosquito salivary antibody biomarkers as surrogate outcomes in trials of vector control Freya Fowkes, The University of Melbourne
2.12pm-2.24pm	Collecting intelligence on mosquito host-seeking behaviour in response to permethrin-treated uniforms Lisa Rigby, Australian Defence Force
2.24pm – 3.00pm Afternoon Tea	
3.00pm – 4.40pm	Session 4 – Rapid Fire Session Great Ocean Road Ballroom Chairs: Cameron Webb & Jana Batovska
3.00pm – 3.05pm	Exposure rate of Queensland macropods to Australian arboviruses associated with human infection Wenjun Liu, ADF Malaria And Infectious Disease Institute
3.05pm-3.10pm	Developing a memorandum of understanding with Parks Victoria for mosquito surveillance Rachel Evans, Department of Health Victoria
3.10pm-3.15pm	Developing a simple, low-cost insecticide resistance monitoring tool for <i>Aedes aegypti</i> Nancy Endersby-Harshman, The University of Melbourne
3.15pm-3.20pm	Characterising the RNA virome of <i>Culicoides brevitarsis</i> in NSW, Australia Stephen Sharpe, CSIRO
3.20pm-3.25pm	Optimizing larval diet for <i>Aedes aegypti</i> Fitness: Impact on <i>Wolbachia</i> -infected and uninfected Mohd Farihan Md Yatim, The University of Melbourne
3.25pm-3.30pm	Heat hardening enhances mosquito survival with implications for climate change responses Apeksha Warusawithana, The University of Melbourne
3.30pm-3.35pm	Japanese encephalitis virus genetic diversity in hosts and viral fitness Clara Maurizzi, CSIRO
3.35pm-3.40pm	Low volume – quadruplex RT-qPCR for the detection of flavivirus in mosquitoes Natsuda Puttharak, Agriculture Victoria
3.40pm-3.45pm	Seasonal activity, lab colonisation, and midgut bacterial microbiome of <i>Aedes vigilax</i> Joseph Sahakian, University of Newcastle
3.45pm-3.50pm	Acquisition of lumpy skin disease virus by <i>Haematobia irritans exigua</i> (Buffalo fly) Melissa Klein, ACDP - CSIRO
3.50pm-3.55pm	First detection of <i>Culex tritaeniorhynchus</i> in Western Australia Abbey Potter, Department of Health WA

3.55pm-4.00pm	'Hamer'ing out cryptic breeding sites surrounding Brisbane international airport Kurt Wadley , <i>Department of Agriculture, Fisheries, and Forestry</i>
4.00pm-4.05pm	A survey of the mosquito fauna of K'gari (Fraser Island) Cassie Jansen , <i>Queensland Health</i>
4.05pm-4.10pm	Feeding patterns of a JEV vector, <i>Culex annulirostris</i> , at Victorian commercial piggeries Kevin Moore , <i>Griffith University</i>
4.10pm-4.15pm	<i>Drosophila melanogaster</i> as a model for miRNAs in arboviral host-virus interactions Tyson Thomson , <i>The University of Queensland</i>
4.15pm-4.20pm	Castlerea virus as an arbovirus biocontrol agent in Australian vector species Hayden Rohlf , <i>QIMR Berghofer</i>
4.20pm-4.25pm	Characterisation of novel Wolbachia strains in Australian mosquitoes for vector control applications Mukund Madhav , <i>CSIRO</i>
4.25pm-4.30pm	Identification of CHIKV-derived viral small RNAs with virus modulatory profiles Adrian Oo , <i>National University of Singapore</i>
4.30pm-4.35pm	Comparison of yeast-generated carbon dioxide and dry ice in baiting mosquito traps Abbey Potter , <i>WA Department of Health</i>
4.35pm-4.40pm	Mosquitoes and lasers: precision insect sorting and classification entomological solution (PiSCES) Brendan Trewin , <i>CSIRO</i>

Close of Day 1

4.40pm

5.00pm-6.00pm

Student Networking & Panel Discussion

Great Ocean Road Ballroom

Tuesday 26th August

Symposium Registration

8.00am

Great Ocean Road Foyer, RACV Torquay Resort

Session 5 – Buruli Ulcer Great Ocean Road Ballroom <i>Chair: Veronique Paris</i>		
8.30am – 10.00am		
8.25am-8.30am	Welcome to Day 2	
8.30am-9.00am	Keynote Address How we worked out that humans acquire Buruli ulcer from mosquitoes Paul Johnson , <i>Austin Health</i>	
9.00am – 9.12am	Invertebrate carriage of <i>Mycobacterium ulcerans</i> in Australian hot spots for Buruli ulcer Stacey Lynch , <i>CSIRO</i>	
9.12am – 9.24am	Challenges in defining suburb risk classifications for <i>Mycobacterium ulcerans</i> in Victoria Catarina Agostinhoantao , <i>Victorian Department of Health</i>	
9.24am – 9.36am	Experimental infection of possums with <i>Mycobacterium ulcerans</i> , the agent of Buruli ulcer Kim Blasdel , <i>CSIRO</i>	
9.36am – 9.48am	<i>Mycobacterium ulcerans</i> in possum faeces precedes emergence in humans, Victoria Bridgette McNamara , <i>Barwon Health</i>	
9.48am – 10.00am	Investigating the role of foxes in the epidemiology of <i>Mycobacterium ulcerans</i> transmission Michael Muleme , <i>Barwon Health</i>	
10.00am – 10.30am Morning Tea		
10.30am – 11.54am	Session 6 – Challenges and Solutions to Mosquito Management (II) Great Ocean Road Ballroom <i>Chair: Brian Johnson</i>	

10.30am – 10.42am	Interventions to control <i>Aedes notoscriptus</i> numbers on the Mornington Peninsula Peter Mee, Agriculture Victoria
10.42am-10.54am	Autodissemination stations to suppress <i>Aedes notoscriptus</i> in urban Victoria Veronique Paris, The University of Melbourne
10.54am – 11.06am	Dual communications strategies – risk avoidance vs disease detection for Buruli ulcer Grace King, Department of Health
11.06am – 11.18am	Mozzie Monitors: lessons learnt in engagement, education and establishing a national program Craig Williams, The University of South Australia
11.18am – 11.30am	Integrating citizen science data for vector-borne disease outbreak prediction and surveillance Shashikala Wijesooriya, University of South Australia
11.30am – 11.42am	Social behavioural factors influencing mosquito borne disease prevention among Australians Rebika Nepali, The University of Sydney
11.42am-11.54am	Neutralising spatial sampling bias for modelling the distribution of Australian mosquito vectors David Duncan, The University of Melbourne
11.54am – 1.00pm Lunch	
1.00pm – 2.24pm	Session 7 – Arbovirus threats to Australia (I) Great Ocean Road Ballroom <i>Chair: Eloise Skinner</i>
1.00pm – 1.12pm	Tracking the 2023-24 Ross River virus outbreak in Queensland using sugar-based surveillance Andrew van den Hurk, Queensland Health
1.12pm – 1.24pm	Predictive modelling of Ross River virus in NSW Suhasini Sumithra, NSW Health
1.24pm – 1.36pm	Spatial and temporal patterns of Ross River virus across Victoria, 2013-2023 Anura Jayasinghe, Loddon Mallee Public Health Unit
1.36pm-1.48pm	Why can some arthritogenic alphaviruses (RRV) infect pigs while others (CHIKV) can't? Daniel Rawle, QIMR Berghofer
1.48pm – 2.00pm	Commercial Japanese encephalitis pig vaccines protect against the Australian Genotype IV virus Caitlin O'Brien, CSIRO ACDP
2.00pm – 2.12pm	Chondrocytes and muscle cells are potential reservoirs for persistent alphaviruses Lara Herrero, Griffith University
2.12pm – 2.24pm	Trends in exotic mosquito-borne diseases in Victoria, with an emphasis on dengue Monique Thomaidis, Department of Health Victoria
2.24pm – 3.00pm Afternoon Tea	
3.00pm – 4.48pm	Session 8 – Arbovirus threats to Australia (II) Great Ocean Road Ballroom <i>Chair: Daniel Rawle</i>
3.00pm-3.12pm	Re-emergence of Japanese encephalitis virus genotype IV in Southeastern Australia in 2024-25 David Williams, CSIRO
3.12pm – 3.24pm	Rethinking the sero-epidemiology of Japanese encephalitis serogroup flaviviruses Maxwell Braddick, Institute for Infection and Immunity
3.24pm – 3.36pm	Assessing the vector competence of Queensland mosquitoes for Japanese encephalitis virus Genotype-IV Andrew van den Hurk, Queensland Health
3.36pm – 3.48pm	Why do some people survive Japanese encephalitis and others don't? Abigail Cox, QIMR Berghofer
3.48pm – 4.00pm	Comparing modelled JEV spillover risk to known transmission. How can models improve? Eloise Skinner, University of Queensland
4.00pm – 4.12pm	Rapid dispersal of Murray Valley encephalitis virus during the 2023 Australian outbreak Jackie Mahar, CSIRO

4.12pm – 4.24pm	Molecular detection of Japanese and Murray Valley encephalitis virus in NT mosquitoes Nina Kurucz, Northern Territory Health
4.24pm – 4.36pm	Increased Flavivirus activity in northern WA 2022 - 2025 Jay Nicholson, Department of Health
4.36pm – 4.48pm	Flavivirus serosurvey of wild birds in the Kimberley region of Western Australia Abbey Potter, Western Australia Department of Health

4.48pm

Close of Day 2

7.00pm – 11.00pm

Onsite Symposium Dinner

Great Ocean Road Ballroom

Feature presentation: The Mosquito and Arbovirus Research Committee

30 Years of Pioneering Research

Brian Johnson, QIMR Berghofer

Wednesday 27th August

8.00am

Symposium Registration

Great Ocean Road Foyer

8.25am– 10.00am	Session 9 – Mosquito-borne disease challenges and building solutions in Papua New Guinea Great Ocean Road Ballroom <i>Chair: Tessa Knox</i>
8.25am – 8.30am	Welcome to Day 3
8.30am- 9.00am	Keynote Address Landscape and challenges of mosquito-borne diseases in Papua New Guinea Stephan Karl, James Cook University
9.00am – 9.12am	Building vector control capacity to reduce malaria transmission in Papua New Guinea Petrina Johnson, James Cook University
9.12am – 9.24am	Detection of Japanese Encephalitis Virus from mosquitoes in Papua New Guinea Joelyn Goi, PNG Institute of Medical Research
9.24am – 9.36am	Diversity of insect-specific viruses in <i>Culex</i> mosquitoes collected in Papua New Guinea Nayomi Danthanarayana, CSIRO/ACDP and Charles Sturt University
9.36am – 9.48am	Lessons learned: designing longitudinal larval habitat surveillance in Kiunga, Western Province Stephen Gideon, Burnet Institute
9.48am – 10.00am	Guardian™ spatial emanator protects against <i>Anopheles punctulatus</i> group in Papua New Guinea Michelle Katusele, James Cook University/PNG Institute of Medical Research
10.00– 10.30am	Morning Tea
10.30am-11.42am	Session 10 – Mosquito Management - Pacific and Beyond Great Ocean Road Ballroom <i>Chair: Lisa Rigby</i>
10.30am – 10.42am	Population genomics of the malaria vector <i>Anopheles farauti</i> through the Southwest Pacific Nigel Beebe, University of Queensland
10.42am – 10.54am	Insights from Laos dengue surveillance with Defence Forces Australia, Laos and Vietnam Weng Chow, ADFMIDI
10.54am – 11.06am	The origin, invasion history and resistance architecture of <i>Anopheles stephensi</i> in Africa Tristan Dennis, Liverpool School of Tropical Medicine / University Of Queensland
11.06am – 11.18am	<i>Farauti</i> and furious: modelling malaria mosquitoes for outbreak prevention Manuela Mendiolar, CSIRO
11.18am – 11.30am	A consortium to strengthen mosquito surveillance and control in the Pacific Amanda Murphy, James Cook University
11.30am – 11.42am	The viral diversity of medically important mosquitoes: a snapshot of Southeast Australia Carla Vieira, QIMR Berghofer

11.42am – 1.00pm	
Lunch	
1.00pm – 2.30pm	Session 11 – Dengue Threats and Response in Australia Great Ocean Road Ballroom <i>Chair: Perran Ross</i>
1.00pm – 1.30pm	Keynote Address Arboviral diseases in the context of climate change Anna-Bella Failloux, Institut Pasteur
1.30pm-1.42pm	Updating the distribution of dengue vectors in the Torres Strait Alexander Gofton, CSIRO
1.42pm – 1.54pm	Modelling the global mosquito miscreants on Mer: <i>Aedes albopictus</i> Francisca Powell, CSIRO
1.54pm- 2.06pm	Still holding back the tiger: battle against <i>Aedes albopictus</i> in Torres Strait Mutizwa Odwell Muzari, Queensland Health, Tropical Public Health Services
2.06pm- 2.18pm	Battling the Dengue Mosquito: The Fight for a <i>Aedes aegypti</i> free Northern Territory Stephen Fricker, Medical Entomology, Northern Territory Health
2.18pm- 2.30pm	Community engagement update from the Torres Strait: conversations towards Indigenous self-determination Brendan Trewin, CSIRO
2.30pm – 3.00pm	
Afternoon Tea	
3.00pm – 4.12pm	Session 12 – Local Government Perspectives in Mosquito Management Great Ocean Road Ballroom <i>Chair: Michael Onn</i>
3.00pm – 3.12pm	City of Armadale mosquito control treatment conducted in State Government managed land Agnes Novinda, City of Armadale
3.12pm – 3.24pm	Continued Surveillance of <i>Aedes vigilax</i> in the Gippsland Lakes Barry Curtain, Wellington Shire Council
3.24pm – 3.36pm	Flying to beat the bite; local government, drones and mosquito control Loyd Phillips Madeira, City of Greater Geelong
3.36pm – 3.48pm	Griffith City Council's 50yr contribution to safer communities Vanessa Johns, Griffith City Council
3.48pm – 4.00pm	Managing mosquito-borne disease in Murrumbidgee Region in NSW Tony Burns, NSW Health, Wagga Wagga
4.00pm – 4.12pm	Responding to a significant pest mosquito infestation in South-West Sydney Cameron Webb, NSW Health Pathology
4.12pm	Close of Day 3

5.30pm-6.30pm

MCAA AGM
Great Ocean Road Ballroom

Thursday 28th August

8.00am	Symposium Registration Great Ocean Road Foyer
8.25am– 10.12am	Session 13 – Mosquito Immunity, Microbiomes & the Future of Arbovirus Control Great Ocean Road Ballroom <i>Chair: Caitlin O'Brien</i>
8.25am – 8.30am	Welcome to Day 4
8.30am – 9.00am	Keynote Address Diverse Viruses, Diverse Responses: Uncovering Variation in Mosquito–Virus Dynamics Esther Schnettler, University of Hamburg, Germany
9.00am – 9.12am	Microbiome and arbovirus interactions in mosquitoes: new opportunities for biological control Leon Hugo, QIMR Berghofer

9.12am – 9.24am	REAVR technology reduces the vectorial capacity of <i>Aedes</i> mosquitoes for Zika virus Dewi Megawati , <i>Warmadewa University</i>
9.24am – 9.36am	Mozzies going viral: insect-specific flaviviruses and their potential for biocontrol Alyssa Peterson , <i>University of Queensland / QIMR Berghofer</i>
9.36am – 9.48am	Structural insights into Tpp2-mediated mosquito control: receptor engagement with Cqm1 Bradley Spicer , <i>Monash University</i>
9.48am – 10.00am	Impact of temperature changes on <i>Aedes aegypti</i> fitness and virus transmission Prasad Paradkar , <i>CSIRO</i>
10.00am – 10.12am	Investigations into insect-specific alphavirus host-restriction mechanisms Jessica Harrison , <i>University of Queensland</i>
10.12am-10.57am	Morning Tea
10.57am – 12.45pm	Session 14 – Innovations in Arbovirus and Mosquito Surveillance Technology Great Ocean Road Ballroom <i>Chair: Peter Mee</i>
10.57am-11.09am	Host nuclear protein interacts with alphavirus 3'UTR to promote early protein translation Therese Lim , <i>National University of Singapore</i>
11.09am-11.21am	Enhancing pathogenic detection in Far North Queensland Melissa Graham , <i>QIMR Berghofer</i>
11.21am-11.33am	Improving the sensitivity of metatranscriptomic arbovirus surveillance Jana Batovska , <i>Agriculture Victoria</i>
11.33am-11.45am	COSMOS: simultaneous virus-vector genomics for mosquito-borne diseases Tanya Golubchik , <i>University of Sydney</i>
11.45am-11.57am	Strengthening One Health surveillance in Victoria: environmental testing for re-emerging flaviviruses Mitchell Batty , <i>VIDRL</i>
11.57am-12.09pm	Inhibitor A11N demonstrates broad-spectrum antiviral activity against Alphaviruses and Flaviviruses Wesley Freppel , <i>Griffith University</i>
12.09pm-12.21pm	Mosquito salivary antibody biomarkers to surveil heterogeneity in exposure to mosquito bites Ellen Kearney , <i>The University of Melbourne</i>
12.21pm – 12.33pm	Proof-of-concept trial of an artificial intelligence system for mosquito identification Binh Luong , <i>City of Bayswater</i>
12.33pm-12.45pm	Awards Presentation and Closing Ceremony
12.45pm	Lunch