



## Program

As at 10 July 2024

Program subject to change without notice

Monday 15 July 2024	
0800-1800	Registration Open (Ground Level, Cairns Convention Centre)
0900-1300	Pre-Meeting Workshop: Masterclass in Communication <i>Pre-registration is required</i>
1515-1730	Welcome Address & Keynote Presentations
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chair	A/Prof Jeremy Barr
1515-1600	Opening Remarks including Welcome to Country A/Prof Jeremy Barr
1600-1645	Keynote Speaker Presentation: Bacteriophage and Bacteria: Dance Partners in an Evolutionary SAMBA Prof Colin Hill
1645-1730	Keynote Speaker Presentation: Intriguing, Novel Phenomena in Extrachromosomal Elements Prof Jillian Banfield
1730-1930	Welcome Reception (City Terrace, Ground Level, Cairns Convention Centre)

Tuesday 16 July 2024	
0730-1800	Registration Open (Ground Level, Cairns Convention Centre)
0830-1000	Virus-Host Interaction Session 1
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	Dr Aleksandra Petrovic and Prof Peter Fineran
0830-0900	Invited Speaker Presentation: Assembly and Function of the Phage Nucleus During Phage Replication Prof Joe Pogliano
0900-0920	Gut Bacteroidaceae Prophages are Transcriptionally Active During Lysogeny and have the Genetic Potential to Alter their Bacterial Host Metabolism Ms Laura Avallaneda-Franco
0920-0940	Pathogen Genomic Surveillance as a Scalable Framework for Precision Phage Therapy Dr Balint Kintses
0940-1000	Molecular Mechanisms Bacteriophage N4 Uses to Decide: Should I Stay, or Should I Go? Dr Jolene Ramsey
1000-1030	Morning Tea (Exhibition - Door 5, Ground Level, Cairns Convention Centre)



<b>1030-1200</b>	<b>Virus Structure &amp; Function</b>	
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre	
Chairs	<i>Dr Matthias Fischer and Prof Trevor Lithgow</i>	
1030-1050	Identification of a Highly Selective Protein Import Pathway in Nucleus-Forming Phage <i>Mr Chase Morgan</i>	
1050-1110	Mycobacteriophage Structure Reveals the Molecular Architecture of Siphoviridae at the Amino Acid Level and its Host Interaction for Viral Genome Ejection <i>A/Prof Joseph Ho</i>	
1110-1120	Structures of Head Assembly Intermediates of Staphylococcus Aureus Phage PHI812 <i>Mrs Maryna Zlatohurska</i>	
1120-1130	Phage Infection in Bacterium and its Regulation: Understanding the Phage-Host Population Dynamics <i>Prof Vikas Jain</i>	
1130-1200	Invited Speaker Presentation: Open Sesame! - Bacteriophage Infection Initiation at the Gram-Negative Envelope <i>Prof Stephanie Barbirz</i>	
1200-1300	Lunch (Exhibition - Door 5, Ground Level, Cairns Convention Centre)	
1300-1430	Poster Session 1 (Exhibition - Door 5, Ground Level, Cairns Convention Centre)	
<b>1430-1600</b>	<b>ECR Session 1</b>	<b>ECR Session 2</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre	M2&3, Mezzanine Level, Cairns Convention Centre
Chairs	<i>Dr Renee Ng and Ms Lejla Kartal</i>	<i>Ms Pamela Tsoumbris and Ms Becky Li</i>
1430-1445	Prophages Induced During Chronic Bordetella Bronchialis Infection Triggered Crossreactive Immunity Against a Therapeutic Phage Hindering Clinical Effectiveness <i>Dr Fernando Gordillo Altamirano</i>	Genetic Engineering of Clostridioides Difficile Phages <i>Mr Andrew Umansky</i>
1445-1500	Electron Cryotomography of Enveloped Phage (ENVB) Infection Cycle Reveals Signatures of Mammalian/Eukaryotic Viral Replication Pathways <i>Ms Somavally Dalvi</i>	A Sea of Zombies! A Mystery of Ribosome-Deprived SAR11 Cells Caused by Phage Infection <i>Dr Jan Brüwer</i>
1500-1515	Better Together: Predicting the Oligomeric State of Bacteriophage Proteins <i>Miss Susanna Grigson</i>	Genome-Resolved Metagenomics Reveals Novel Insights into Archaeaviruses in a Subtropical Estuary <i>Ms Apoorva Prabhu</i>
1515-1530	Leveraging Long Reads to Study the Human Gut Phageome <i>Ms Angela Hickey</i>	Beyond Standard Models: Rethinking Bacterial L-Forms in Phage Therapy Development <i>Dr Aleksandra Petrovic Fabijan</i>
1530-1545	New Antiviral Defences Are Genetically Embedded Within Prokaryotic Immune Systems <i>Mr Leighton Payne</i>	Viral Proteins Activate PARIS-Mediated tRNA Degradation and Viral tRNAs Rescue Infection <i>Dr Artem Isaev</i>
1545-1600	Long-Read Sequencing Reveals Extensive Capsid-Mediated Horizontal Gene Transfer in the Human Gut <i>Ms Tatiana Borodovich</i>	A Novel Mutation in Gale Mediates Phage Resistance in Klebsiella Pneumoniae by Preventing Phage Adsorption <i>Ms Braira Wahid</i>
1600-1630	Afternoon Tea (Exhibition - Door 5, Ground Level, Cairns Convention Centre)	



<b>1630-1800</b>	<b>Bioinformatics and New Research Avenues</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>Prof Ruby Lin and Dr Evelien Adriaenssens</i>
1630-1650	Phables Enables the Analysis of Complete Bacteriophage Genomes from Metagenomes <i>Dr Vijini Mallawaarachchi</i>
1650-1710	The Good, the Bad and the Ugly: What's Keeping Me up at Night in Viromics <i>Dr Ryan Cook</i>
1710-1730	MetaCerberus: Distributed Highly Parallelised Scalable HMM-Based Implementation for Robust Functional Annotation Across the Tree of Life <i>Dr Richard Allen White III</i>
1730-1800	Invited Speaker Presentation: Expanding Our Viral Bioinformatics Frontiers <i>Prof Rob Edwards</i>
<b>1800-1900</b>	<b>Early Career Researchers Session (M2&amp;3, Mezzanine Level, Cairns Convention Centre)</b>

<b>Wednesday 17 July 2024</b>	
0800-1800	Registration Open (Ground Level, Cairns Convention Centre)
<b>0830-1000</b>	<b>Viral Ecology</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>A/Prof Steve Petrovski and Dr Liu Ying</i>
0830-0900	Invited Speaker Presentation: Hotspot of cyanophage infection between two gyres in the North Pacific Ocean <i>Prof Debbie Lindell</i>
0900-0920	Old Tools, New Applications: Use of Environmental Bacteriophages for Surveillance of Drug Resistant Typhoid Infections <i>Dr Yogesh Hooda</i>
0920-0940	Virus-Host Relationships Across Hydrocarbon-Impacted Marine Sediments <i>Ms Sarah P. Esser</i>
0940-1000	Low Infection Rate and Heterogeneous Virus-Host Interaction Among Freshwater Bacteria Revealed at the Single-Cell Resolution <i>Dr Yusuke Okazaki</i>
1000-1030	Morning Tea (Exhibition - Door 5, Ground Level, Cairns Convention Centre)
<b>1030-1200</b>	<b>Archaeal &amp; Eukaryotic Viruses</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>Dr Fabai Wu and Prof Stefanie Barbirz</i>
1030-1050	Host-Virus-Virophage Interactions in Marine Chlorarachniophyte Algae <i>Dr Matthias Fischer</i>
1050-1110	Induction of an Integrated Giant Virus in a Model Green Alga <i>Miss Paula Garcia</i>
1110-1130	Changing Tides: Fitness Costs of HFPV-1 Chronic Infection in the Haloarchaeon <i>Haloferax Volcanii</i> <i>Dr Tomas Alarcon Schumacher</i>
1130-1200	Invited Speaker Presentation: Molecular Insights into Enveloped Virus Budding in Archaea <i>Dr Ying Liu</i>
1200-1205	Group Photo (Location TBC)
1205-1300	Lunch (Exhibition - Door 5, Ground Level, Cairns Convention Centre)



1300-1325	<b>ISVM General Assembly</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
1325-1330	<i>Session Changeover</i>
1330-1500	<b>Bacterial Immune Systems</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chair	<i>A/Prof Breck Duerkop and Prof Robert Edwards</i>
1330-1400	Invited Speaker Presentation: Phage Counter-Defence Strategies and their Regulation <i>Prof Peter Fineran and Dr Nils Birkholz</i>
1400-1420	De Novo Discovery of Antiviral Mechanisms Using Adam <i>Prof Gipsi Lima-Mendez</i>
1420-1440	A Gift from Asgard: The Prokaryotic Origin of Eukaryotic Immune Mechanisms <i>Prof Pedro Leão</i>
1440-1500	Discovery of Bacterial Immune System Family that Specifically Inhibits Nucleus-Forming Jumbo Phages <i>Dr Yuping Li</i>
1500-1530	Afternoon Tea (Exhibition - Door 5, Ground Level, Cairns Convention Centre)
1530-1630	<b>This Week in Virology - Live Recording</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chair	<i>Dr Jolene Ramsey</i>
1530-1630	Live recording of This Week in Virology podcast <i>Prof Vincent Racaniello (presenting virtually) with Prof Rob Lavigne, Prof Krystyna Dabrowska and Dr Jolene Ramsey</i>
1630-1800	<b>Virus-Host Interaction Session 2</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>Dr Sandra Morales and A/Prof Vivek Mutalik</i>
1630-1650	Sequential Membrane- and Protein-Bound Organelles Compartmentalise Genomes During Phage Infection <i>Ms Emily Armbruster</i>
1650-1710	Deep Viral Metagenomics Reveals Dynamic Changes in Mobile Element Interaction Networks Following Intestinal Microbiota Transplantation <i>Mr Benjamin Mitchell</i>
1710-1730	Megaphage Isolates Reveal the Biology of the Largest Phages Indicating Some to Carry Putatively Functional Crispr Systems <i>Dr Elina Laanto</i>
1730-1800	Invited Speaker Presentation: Evolutionary Arms Race Through the Lens of Enterococcal Phage Infection and Resistance <i>Dr Breck Duerkop</i>
1800-1930	Poster Session 2 (Exhibition - Door 5, Ground Level, Cairns Convention Centre)



Thursday 18 July 2024	
0800-1800	Registration Open (Ground Level, Cairns Convention Centre)
0830-1000	<b>Phage Therapy Session 1 - Research</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>A/Prof Anthony Kicic and Dr Tobi Nagel</i>
0830-0850	Focus on the Phage Production Pipeline of PhagoCHUV - the Lausanne University Hospital Phage Therapy Program <i>Dr Gregory Resch</i>
0850-0910	Entelli-02: Standardised Front-Line Phage Product for Nosocomial Enterobacter Cloacae Complex Infections <i>Dr Dinesh Subedi</i>
0910-0930	Navigating the Hepatic Highway: The Role of Liver Sinusoidal Cells in the Rapid Clearance of Blood-Borne Phage K1F <i>Dr Anett Kristin Larsen</i>
0930-0945	On-Demand, Personalised, GMP Phage Therapy in the United States <i>Dr Austen Terwilliger</i>
0945-1000	Overcoming Lipopolysaccharide Modification as the Key for Increased Biofilm-Control of a Pbnavirus After Adaptive Evolution on P. Aeruginosa Biofilms <i>Ms Luciana Meneses</i>
1000-1030	Morning Tea (Exhibition - Door 5, Ground Level, Cairns Convention Centre)
1030-1200	<b>Phage Therapy Session 2 - Clinical Application</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>Dr Stephanie Lynch and Prof Graham Hatfull</i>
1030-1100	Invited Speaker Presentation: Phage Australia - Current Status and Next Steps <i>Prof Jon Iredell</i>
1100-1120	Duofag®: Human Clinical Trial <i>Ms Dana Štveráková</i>
1120-1140	Advancing Bacteriophage Therapy from Discovery to Clinical Trials <i>Dr Steven Branston</i>
1140-1150	Retrospective Review of a Bacteriophage Treatment at the Eliava Phage Therapy Center (2018-2023) <i>Dr Mzia Kutateladze</i>
1150-1200	Interim Report on the Standardised Treatment and Monitoring Protocol for Adult and Paediatric Patients Receiving Bacteriophage Therapy (STAMP) <i>Dr Holly Sinclair</i>
1200-1300	Lunch (Exhibition - Door 5, Ground Level, Cairns Convention Centre)
1300-1430	Poster Session 3 (Exhibition - Door 5, Ground Level, Cairns Convention Centre)



1430-1600	ESGNTA Session - When you come to a fork in the road, take it: The critical juncture of phage therapy clinical application
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chair	<i>Prof Ran Nir-Paz</i>
1430-1440	Current Few (Out of Too Many) Crossroads in Phage Therapy <i>Prof Ran Nir-Paz</i>
1440-1450	Phage Susceptibility Testing: A Clinical Microbiology Perspective <i>Dr David Pride</i>
1450-1500	Chemistry, Manufacturing and Controls Information for Phage Therapy Products in the USA <i>Dr Susan Lehman</i>
1500-1510	Bacteriophage Therapies and the Australian Regulatory Framework <i>Ms Anthea Bates</i>
1510-1520	Clinical Applications of Phage Therapy <i>Ms Gina Suh</i>
1520-1600	Panel Discussion on Clinical Phage Therapy <i>Moderated by Prof Ran Nir-Paz with panelists Dr David Pride, Dr Susan Lehman, Ms Anthea Bates, Ms Gina Suh, Prof Jon Iredell and Dr Greg Resch</i>
1600-1630	Afternoon Tea (Exhibition - Door 5, Ground Level, Cairns Convention Centre)
1630-1800	<b>Microbiome &amp; Practical Applications of Virology</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>Dr Lucy Furfaro and Dr Ann Gregory</i>
1630-1650	Mother-Infant Gut Virome: Insights from 300 Lifelines Next Families <i>Ms Sanzhima Garmaeva</i>
1650-1710	Viroid-Like Colonists of Human Microbiomes <i>Mr Ivan Zheludev</i>
1710-1730	Expanding the Diversity of the Human Gut Virome for Biomedical Research Through CGVR <i>Prof Lianmin Chen</i>
1730-1800	Invited Speaker Presentation: Leveraging Phage-Bacterial Coexistence in the Gut Microbiome <i>A/Prof Bryan Hsu (presenting virtually)</i>
1900-2300	Networking Dinner (Rainforestation Nature Park, Kuranda)



Friday 19 July 2024	
0800-1430	Registration Open (Ground Level, Cairns Convention Centre)
0830-1000	<b>Virus Evolution</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>Dr Heather Hendrickson and Prof Debbie Lindell</i>
0830-0900	Invited Speaker Presentation: Viral Predation Guilds of the Human Gut <i>Dr Ann Gregory</i>
0900-0920	Pathogenicity Islands Uncouple Prophages from Intra-Host Competition to Promote their Reproductive Success During Polylysogeny <i>Dr John Chen</i>
0920-0940	A Novel Repressor Class for Lysogeny Control in Temperate T7-Like Phages <i>Dr Jason Gill</i>
0940-1000	Extraintestinal pathogenic Escherichia coli response to bacteriophages: in vitro versus in vivo <i>Dr Carola Venturini</i>
1000-1030	Morning Tea (Exhibition - Door 5, Ground Level, Cairns Convention Centre)
1030-1200	<b>Synthetic Biology</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>Dr Paul Jashcke and Prof Rotem Sorek</i>
1030-1100	Invited Speaker Presentation: Phage Foundry: A High-Throughput Platform for Rapid Design and Development of Countermeasures to Combat Emerging Drug- Resistant Pathogens <i>Dr Vivek Mutalik</i>
1100-1120	Chimeric endolysins that target and kill the phytopathogen Pseudomonas syringae pv. Actinidiae <i>Dr Susie Warring</i>
1120-1140	Genome-Wide Characterisation of Diverse Bacteriophages Enabled by RNA-Binding CRISPRi <i>Dr Brady Cress and Dr Ben Adler</i>
1140-1200	Engineering the Structure and Dynamics of Encapsulin Virus-Like Particles <i>Dr Yu Heng Lau</i>
1200-1300	Lunch (Exhibition - Door 5, Ground Level, Cairns Convention Centre)
1300-1430	<b>Closing Address, Keynote Presentation and Awards</b>
Room	Auditorium C (Doors 14 and 15), Mezzanine Level, Cairns Convention Centre
Chairs	<i>A/Prof Jeremy Barr and Prof Ruby Lin</i>
1300-1345	Keynote Speaker Presentation: A Journey into the Immune System of Bacteria <i>Prof Rotem Sorek</i>
1345-1400	Presentation Awards <i>Prof Zuzanna Drulis-Kawa and Dr Matthias Fischer</i>
1400-1405	ISVM Presidential Address <i>Prof Lone Bronstedt</i>
1405-1410	VoM 2026 Meeting Announcement <i>Speaker to be announced</i>
1410-1430	Closing Remarks <i>A/Prof Jeremy Barr</i>
1430	Meeting Closes