



International Bioactives Conference 2026

September 21 – 24 2026
Macquarie University

PROGRAM

Program at a glance

Connecting Science, Industry and Innovation for a Healthier Future.

Please note this is a preliminary program and is subject to change. Programs are dated in the footer below. Check you have the most up to date version by visiting

<https://www.bioactives2026.com/program>

DAY 1

TUESDAY 22 SEPTEMBER

THEME: Discovery and foundations

Discovery & emerging bioactive sources | Mechanisms, bioavailability & metabolism | Analytical & high resolution technologies | Bioactives in disease prevention and immune modulation | Computational & predictive tools

Poster Presentation & Networking Evening

DAY 2

WEDNESDAY 23 SEPTEMBER

THEME: Applications & Translation

Industrial applications & biomanufacturing | Food bioactives & clinical translation | Sustainability & circular bioeconomy | Regulation, policy & consumer trust

Evening Cocktail Function @ Taronga Function Centre, Mosman

DAY 3

THURSDAY 24 SEPTEMBER

THEME: Future & Integration

Future bioactive science & technologies | Health futures & precision modulation | Integration, ethics & societal impacts | Native bioactives, biodiversity & innovation

SESSION LENGTH

Plenary talks (40 min)*: 35 min talk + 5 min Q&A

Keynote talks (30 min): 25 min talk + 5 min Q&A

Contributed Oral Presentation from Abstracts (15 min): 12 min talk + 3 min Q&A

Lightning Talks (5 min)**: Combined Q&A at end of session

Tuesday 22 September

Discovery and characterisation



TIME	PROGRAM	G02 Lecture Theatre
8:00 am	Registration Opens Ground Floor Foyer, Wally's Walk Entrance	
9:00 am	Welcome and opening remarks Professor Anwar Sunna, Organising Committee Chair & Director FAAB	
9:25 am	Opening Plenary Lecture Prof Mary Ann Lila (North Carolina State University, USA) – <i>Plant Bioactives That Protect Human Health - The Call of the Wild</i>	
10:05 am	Morning tea Networking and exhibition	GROUND FLOOR FOYER
10:35 am	Session 1: Discovery, Bioavailability & Mechanisms of Bioactives 10:35–11:05 A/Prof Hafiz Suleria (University of Melbourne) – <i>Understanding Food Bioactives from Digestion to Absorption: Integrated in vitro, Cellular, and in vivo Porcine Models</i> 11:05–11:20 Dr Latheesha Abeywardana (Deakin University) – <i>Electrospun Multi-Encapsulation of Vitamin A for Edible 3D Printing and Personalised Nutrition</i> 11:20–11:35 Dr Sophie Selby-Pham (University of Melbourne) – <i>Modelling phytochemical intestinal absorption to enable functional fingerprinting of complex plant extracts</i> 11:35–12:05 Prof Ana Rodriguez-Mateos (King's College London, UK) – <i>Bioavailability and Beyond: Understanding Biological Responses to Dietary (Poly)phenols</i>	
12:10 pm	Lunch Break Networking and exhibition	GROUND FLOOR FOYER
1:10 pm	Session 2: Foodomics, Analytical Technologies & Disease Prevention 13:10–13:40 Prof Philippe Schmitt-Kopplin (Technical University of Munich, Germany) – <i>Food Functional Metabolomics in a Nutshell: Bioactives from Biotic and Abiotic Chemistry</i> 13:40–13:55 Dr Madhuri Hande (FAAB, Macquarie University) – <i>Rapid Targeted Analysis of Hydrolyzed Plant Polysaccharides by DREAMTIME NMR Spectroscopy</i> 13:55–14:10 Amaha Adhanu (Edith Cowan University) – <i>Source-specific nitrate and nitrite intake and the incidence of chronic kidney disease in the Danish Diet, Cancer, and Health Cohort</i> 14:10–14:40 A/Prof Catherine Bondonno (Edith Cowan University) – <i>The Strange Case of Nitrate: The Dr Jekyll and Mr Hyde of Human Health</i>	

DAY 1

Tuesday 22 September

Discovery and characterisation

TIME	PROGRAM	G02 Lecture Theatre
2:45 pm	Afternoon Tea Networking and exhibition	GROUND FLOOR FOYER
3:15 pm	Session 3: Plant Bioactives & Sustainable Food Systems 15:15–15:45 Prof Rachel Burton (Adelaide University) – <i>Bioactive Bonanza: Rich Pickings in Australia's Emerging Crops</i> 15:45–16:00 Dr Liam Engel (Western Sydney University) – <i>Mescaline in Cacti: Analytical Challenges, Quantitative Variation, and Implications for Sustainable Bioactive Resource Development</i> 16:00–16:15 Temitope Adeboye (Western Sydney University) – <i>From Leaf to Bioactive: Optimising Processing of Vernonia amygdalina (Bitter Leaf) for Functional Tea Development</i> 16:15–16:45 Prof Yasmina Sultanbawa (University of Queensland) – <i>Opportunity Crops and Bioactive Compounds: Driving Innovation for Industry Applications</i> 16:45–17:00 Dr Keshav Raj Paudel (Western Sydney University) – <i>Kakadu Plum Extract Disrupts Proliferation and Metastatic Hallmarks of Lung Cancer.</i>	
12:20	Lightening Talks 17:00–17:05 Tina Kayeye (FAAB, Macquarie University) – <i>Understanding Fat, Protein and Carbohydrate Rearrangement of Plant-Based Milk Alternatives in Coffee</i> 17:05–17:10 Himani Gamage (Edith Cowan University) – <i>Applying Discovery Proteomics Coupled with In-Silico Data Mining to Understand the Bioactive Potential of Cucumis Sativus (Lebanese Cucumber) Tissue Extracts</i> 17:10–17:15 Sofia Kokkinis (University of Technology Sydney) – <i>Liposomal Encapsulated Curcumin Attenuates Lung Cancer Proliferation, Migration and Apoptosis</i> 17:15–17:20 Naseema Kolathingal-Thodik (University of Melbourne) – <i>Maternal Sugarcane-derived Polyphenol Supplementation Programme the Foetus via Neonatal Salicylate- and Lipid-associated Metabolome Shifts</i> 17:20–17:25 Lara Taggar (Western Sydney University) – <i>Cardiovascular-Relevant Bioactivity Profiling of Native Australian Acacia Species: Antioxidant, Phenolic and Anti-Inflammatory Properties</i>	
5:40 PM	Poster Networking Evening Poster presentation session with networking and light refreshments	Level 3, 330X Function Room

Wednesday 23 September

Applications & Translation



TIME	PROGRAM	G02 Lecture Theatre
8:30 am	Registration Opens Ground Floor Foyer, Wally's Walk Entrance	
9:00 am	Morning Plenary Lecture Prof Michelle Colgrave (Edith Cowan University/CSIRO) – <i>Bioactive Peptides and Proteins: Using Machine Learning, Proteogenomics and Analytical Validation to Move from Discovery to Impact</i>	
9:40 am	Session 1: Bioactive Product Development & Translation 9:40–10:10 Prof Munish Puri (Massey University, New Zealand) – <i>Redefining Industrial Biotechnology: Intelligent Biomanufacturing of Future Foods and Bioactive Ingredients</i> 10:10–10:25 A/Prof Quan Vuong (University of Technology Sydney) – <i>Challenges and Opportunities in Translating Leptospermum Bioactives into Functional Products</i> 10:25–10:40 Dr Mitchell Low (Western Sydney University) – <i>Synergistic Anti-Inflammatory Effects of Celery Seed and Botanical Extracts: Bioactivity-Guided Identification and Optimisation of Multi-Herb Combinations</i>	
10:40 am	Morning Tea Networking and exhibition	GROUND FLOOR FOYER
11:10 am	Session 2: Bioactive Product Development & Translation 11:10–11:40 Dist. Prof Colin Barrow (Deakin University,) – <i>High Value Bioproducts from Organic Waste to Promote a Circular Economy</i> 11:40–11:55 Fathima Afka Dee (University of Melbourne) - <i>From Beany to Meaty: Co-Fermentation of Textured Soy Protein for Meat Analogues</i> 11:55–12:10 Aaron Bennett (University of Technology Sydney) - <i>The Comparative Analysis of Various Ionizing Bioburden Reduction Methods for Medicinal Cannabis</i>	
12:10 pm	Lunch Networking and exhibition	GROUND FLOOR FOYER

Wednesday 23 September

Translation and application



TIME

PROGRAM

G02 Lecture Theatre

1:10 pm

Session 3: Food Bioactives & Clinical Translation

13:10–13:40 **A/Prof Karen Murphy** (Adelaide University) – *Translating Food Bioactives into Healthy Ageing Outcomes: Insights from Mediterranean Diet Intervention Trials*

13:40–13:55 **Dr Elizabeth Barber** (Monash University) – *Impact of Nutrient-dense Spinach-enriched Bread on Postprandial Glycaemia, Satiety and Sensory Acceptance: A Randomised Controlled Crossover Trial in Healthy Adults*

13:55–14:10 **Dr Hasinika Gamage** (Macquarie Uni) – *Unravelling a Butyrate-linked Gut-brain Axis in Machado Joseph Disease*

14:10–14:40 **Dr Xuyu Liu** (University of Sydney) – *From Kitchen to Bench to Bedside: Investigating the Antithrombotic Potential of Brassica Vegetable-Derived Antiplatelet Agents*

14:40–15:10 **Prof Miranda Miroso** (University of Otago, New Zealand) – *Translating Bioactives from the Circular Food Economy*

3:10 pm

Afternoon tea

Networking and exhibition

**GROUND FLOOR
FOYER**

3:40 pm

Session 4: Integration, Ethics & Societal Impact

15:40–16:10 **Dr Emma Beckett** (Australian Catholic University) – *Beyond Reductionism: Communicating Bioactive Science for Real-World Impact*

16:10–16:25 **Dr Paul Mason** (Macquarie University) – *More than Food, Not Quite Drug: Stress-testing Pharmacological Models of Bioactive Compounds*

16:25–16:55 **Prof Karen Charlton** (University of Newcastle) – *Navigating the Regulatory Landscape for Food Bioactives*

7 – 9 pm

Cocktail function

Cocktail dinner to be held at Taronga Function Centre, Mosman. Bus transport will be provided and will depart Macquarie University at approx. 6:15pm. Guests should arrive at the bus departure point no later than 6pm.

**TARONGA FUNCTION
CENTRE, MOSMAN**

DAY 3

Thursday 24 September

Future and Integration

TIME	PROGRAM	G02 Lecture Theatre
8:30 am	Registration Open Ground Floor Foyer, Wally's Walk Entrance	GROUND FLOOR FOYER
9:00 am	Morning Plenary Lecture Prof Philip Yongxin Li (The University of Hong Kong, Hong Kong) – <i>Decoding the Cryptic Chemistry of Microbiota for Drug Discovery</i>	
9:40 am	Session 1: Health Futures: Precision Modulation 9:40–10:10 Prof Cristina Andrés-Lacueva (University of Barcelona, Spain) – <i>Deciphering Health Futures through Precision Modulation: The Power of Multi-Omics, Exposome-Based Approaches, and Personalized Interventions</i> 10:10–10:25 Dr Erin Clarke (University of Newcastle) – <i>From Fed to Free-living: Integration of Dietary Biomarkers and Metabolomics into Precision Nutrition</i> 10:25–10:55 A/Prof Andrew Holmes (University of Sydney) – <i>Promises and Pitfalls for Precision Nutrition</i> 10:55–11:10 Jenani Sutharsan (University of New South Wales) – <i>Fermentation Enhances the Bioaccessibility of Xanthophylls and the Prebiotic Potential of Vegetables</i>	
11:10 am	Morning Tea Networking and exhibition	GROUND FLOOR FOYER
11:40 am	Session 2: Emerging Bioactive Therapeutics & Future Translation 11:40–12:10 Prof Kamal Dua (Western Sydney University) – <i>Emerging Next-Generation Bioactive Therapeutics for Lung Diseases through the Integration of Phytomedicine, Biology and Advanced Drug Delivery Systems</i> 12:10–12:25 A/Prof Ting Huyan (Northwestern Polytechnical University, China) – <i>Pre-immunized NK Cell-Derived Exosomes as Bioactive Messengers for Transferring Antigen-Specific Memory-like Anti-tumor Immunity</i>	
12:25	Lunch Networking and exhibition	GROUND FLOOR FOYER

Thursday 24 September

Impact and future directions



TIME	PROGRAM	G02 Lecture Theatre
1:25 pm	Session 3: Future Bioactive Discovery Technologies 13:25–13:55 Prof Björn Hamberger (Michigan State University, USA) – <i>Inspired by Nature’s Principles: Discovery and Portability of Terpene Biosynthesis</i> 13:55–14:10 Saroj Dulal (University of Newcastle) – <i>Bridging Ethnobotany and Biotechnology: Pharmaceutical and Industrial Bioactives from a Single Microbacterium Endophyte</i> 14:10–14:40 Dr Fabien Plisson (Ingenie Bio) – <i>Lessons from Integrating Machine Learning into the Bioactive Discovery Pipeline</i> 14:40–14:55 Krutika Purohit (FAAB, Macquarie University) – <i>AI-guided Discovery of Multifunctional Bioactive Peptides from Edible Rhizomes and Root Vegetables</i>	
2:55 pm	Afternoon tea Networking and exhibition	GROUND FLOOR FOYER
3:25 pm	Lightening Talks 15:25–15:30 Jonathan Rosenzweig (University of New England) – <i>Antimicrobial Activity of Hericium erinaceus (Bull.) Persoon Extracts Against Neurodegeneration-Associated Bacterial Pathogens: Bioactive Profiling and Cultivation Optimisation</i> 15:30–15:35 Atnaf Abate (FAAB, Macquarie University) – <i>Functional Characterisation of Polyunsaturated Fatty Acids and their Metabolites at GPR55 Receptor Using the TRUPATH Assay</i> 15:35–15:40 Damian Hall (Western Sydney University) – <i>Tryptamine Derived Pictet–Spengler Metabolites in Australian Acacia Species: Spontaneous or Enzymatic Origin?</i> 15:40–15:45 Emmanuel Ofosu Mensah (FAAB, Macquarie University) – <i>Anticancer Properties of Fucoidan and its Potential Molecular Targets</i> 15:45–15:50 Zarnab Asif (FAAB, Adelaide University) – <i>Understanding the Digestibility of Meat Fat Analogues: Implications for Nutraceuticals Absorption</i>	
4:00 pm	Closing Plenary Lecture Prof Elaine Holmes (Hong Kong University of Science and Technology, Hong Kong) – <i>From Molecules to Meaning: Bioactives, Metabolism and the Future of Precision Health</i>	
4:40 pm	Conference close Professor Anwar Sunna, Organising Committee Chair & Director FAAB	

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Delegate information

VENUE

Michael Kirby Building, 17 Wallys Walk
Macquarie University, NSW 2109

You can find maps of the university campus on the [university website](#).

REGISTRATION

Registration desk will be open from
8:00am-9:00am on 22 September
8:30 – 9:00am on 23 and 24 September.

The registration desk will also be staffed during meal breaks for any assistance you require.

ACCESSIBILITY

The Michael Kirby Building has an accessible entrance via Central Avenue, central lift service to all floors and accessible toilets. There are accessible parking options in the South 2 and East 3 carparks.

A quiet space will be available on the ground floor. Attend the registration desk during breaks or ask a volunteer for directions or assistance.

TRANSPORT

The closest public transport hub is **Macquarie University Metro Station**. Buses also stop along University Avenue and at the nearby Macquarie Centre bus interchange. Plan your public transport route: [Transport for NSW Trip Planner](#).
By Car: <https://www.mq.edu.au/about/locations/parking/visitor>

CONTACT

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