

# FOOD FUTURES

## Nourishing a nation

### ACKNOWLEDGEMENT OF COUNTRY

The Australian Academy of Science acknowledges the Traditional Owners of the unceded land on which this event is held – the Turrbal and Jagera Peoples. We acknowledge their Elders past and present, as well as their emerging leaders.

Australia boasts a rich scientific history that spans more than 65,000 years, and it is by acknowledging and learning from our history that we grow stronger together.

We acknowledge and warmly welcome all Aboriginal and Torres Strait Islander People joining the event, either in person or online.

### ABOUT THE NATIONAL SYMPOSIUM

The Australian Academy of Science is delighted to bring its National Symposium to Brisbane in 2024, as a partner of the World Science Festival Brisbane.

This National Symposium is traditionally part of the Academy's flagship event, *Science at the Shine Dome*. This year it is being held as a stand-alone event, separate to *Science at the Shine Dome*, and being held outside of Canberra for the first time.

This year's symposium, titled *Food futures: Nourishing a nation*, will explore how the food on our plates – whether it's taco Tuesday or Sunday roast – is changing. More information about the event is on the next page in the message from our symposium convenors.

### THANK YOU

The Australian Academy thanks the convenors of this symposium – Professor Christine Beveridge FAA, Dr John Kirkegaard FAA and Professor Stephen Simpson AC FAA FRS. We thank you all for guiding the direction of the topics of the symposium, and helping to identify the program of distinguished experts we will hear from at the event.

Thank you to all the speakers and panellists taking part in this symposium. We greatly appreciate you joining us to share your knowledge and expertise, and understand the time it takes to prepare and be involved in an event like this.

Thank you to World Science Festival Brisbane for collaborating with the Academy to bring this event to Brisbane as part of its exceptional 2024 program.

Thank you to our event partners – Charles Perkins Centre at the University of Sydney and the Waite Campus at the University of Adelaide. Your support of our important National Symposium is greatly appreciated.



## MESSAGE FROM THE CONVENORS

Welcome to the Australian Academy of Science National Symposium for 2024, *Food futures: Nourishing a nation*. We are pleased to be in Brisbane as part of the World Science Festival.

Today we explore the very substance of life: food!

Australia is one of the most food-secure countries in the world and our food exports are a significant part of our economy. But our population is growing and getting older, the climate is altering what we can grow and where, and supply chains are being disrupted by global conflicts and pandemics. We also play a significant role in our region and globally with respect to technical innovation and new products such as more hardy grain varieties.

How will a carbon-neutral world affect our agricultural export trade, Australian farmers, scientists and consumers? And how do we strike a balance between the production of healthier foods with lower environmental impact, without compromising the profitability of the agriculture and food sectors?

Australian scientists pioneer research on improving and developing new foods, producing food and farming systems with less impact on the environment, and in understanding the links between food, nutrition and health. With past successes including gluten-free barley and protein substitutes, Australian scientists are now developing hemp and native plants as viable food sources. With these continuous breakthroughs and developments, what will the food on our plates look like in 2040? Come and sample products made with sustainable crops – can you tell the difference?

This National Symposium will engage and relate to everyday Australians' experiences while illustrating Australia's scientific capabilities and how they will shape and meet the future needs of the nation.

Our program for the day will bring knowledge, ideas and meaningful discussion in the following sessions:

- Food production systems: the science underpinning supply, safety and sustainability
- Climate change resilience in agriculture: impacts of science, technology and policy
- Nutrition, science and technology: food facts you need to know

To explore these topics and more, we have convened today's symposium *Food futures: Nourishing a nation*.

We look forward to a productive day of discussions and engagement.



**Professor Christine Beveridge FAA**  
Centre Director, ARC Centre for Plant  
Success in Nature and Agriculture,  
University of Queensland



**Dr John Kirkegaard FAA**  
Chief Research Scientist  
CSIRO Agriculture and Food



**Professor Stephen Simpson AC FAA FRS**  
Academic Director, Charles Perkins Centre  
University of Sydney



# EVENT PROGRAM

Friday 22 March, Sky Room, Brisbane Convention & Exhibition Centre (BCEC)



9.30am: Welcome

## Acknowledgment of Country and Welcome

- Professor Lyn Beazley AO FAA FTSE, Secretary for Education and Public Awareness, Australian Academy of Science

## Welcome Address

- Professor Kerrie Wilson, Queensland Chief Scientist

## Opening Keynote Address

### *Appetites for Change: Rebalancing the Australian Food System*

- Professor David Raubenheimer, Professor of Nutritional Ecology, Charles Perkins Centre and School of Life and Environmental Sciences, University of Sydney

Professor Raubenheimer will set the scene for the symposium by showing how his work can help us understand how to rebalance the Australian agricultural and food environment. This rebalance will lead to healthier diets with lower environmental impacts, without compromising the profitability of the agriculture and food sectors. He will end by telling us about a new approach he and colleagues have developed for helping to achieve this rebalancing, which was awarded the 2022 Eureka Prize for Excellence in Interdisciplinary Science.



## 10.35am: Session 1 – Food production systems: the science underpinning supply, safety and sustainability

Science underpins the race to ensure global food production keeps pace with population growth. Yet an immense challenge for agriculture remains in a nation with an increasingly affluent and discerning population: how can we maintain global food security, minimise greenhouse gas emissions, and protect the agricultural resource base while maintaining wildlands and biodiversity? How have agricultural production systems evolved to tackle such a challenge and what threats and opportunities lie ahead?

Australia ranks among the most food-secure countries in the world, yet our farmers produce food on ancient, weathered soils in one of the riskiest environments on Earth. We produce much more food than we consume, with more than 70% of agricultural production exported, so we play a significant role in the food security of other countries. Australian science and expertise in agriculture and food production systems is also exported, with Australians holding leadership roles in many international centres dedicated to sustainable improvements in the production of staple crops globally.

This session will delve into the cutting-edge and sometimes contentious science around the development of sustainable food production systems and discuss the pros and cons of different production systems, explore the evidence behind them, and highlight Australian science and innovation leading the way to a food secure future.

## Presentation

- Dr John Kirkegaard FAA, Chief Research Scientist – Farming Systems, CSIRO Agriculture and Food

## Panel discussion

- Moderator and contributor: Professor Matthew Morell, Institute Director, Queensland Alliance for Agriculture and Food Innovation (QAAFI)
- Dr Greg Rebetzke, Chief Research Geneticist, CSIRO Agriculture and Food
- Professor Wendy Umberger, Chief Executive Officer, Australian Centre for International Agricultural Research (ACIAR)
- Professor Neena Mitter, Centre Director, Centre for Horticultural Science, Queensland Alliance for Agriculture and Food Innovation (QAAFI)



## 12.00pm: Lunch and interactive displays and food tastings



## 1.15pm: Session 2 – Climate change resilience in agriculture: impacts of science, technology and policy

Our agricultural systems routinely draw on science and technology to manage identified challenges such as climate change – from breeding crops to suit our environment, innovating with automation, or using AI to predict weather impacts. Scientists are working hand in hand with food producers to feed the nation and secure agricultural exports.

But policies to mitigate and adapt to the changing climate have an impact on agriculture and its supporting sectors like transport and energy, both in Australia and among our export partners. How are these policies shaping our food production systems and export trade, and affecting our farmers and consumers? This session will discuss how we can not only survive, but create a thriving Australian agricultural sector in a net zero future.

## Address

- Adam Fennessy PSM, Secretary, Australian Department of Agriculture, Fisheries and Forestry

## Presentation

- Professor Richard Eckard FTSE, Director, Primary Industries Climate Challenges Centre, University of Melbourne

## Presentation


- Dr Rohan Nelson, Director, Food System Horizons, University of Queensland and CSIRO

## Panel discussion

- Moderator and contributor: Professor Richard Eckard FTSE, Director, Primary Industries Climate Challenges Centre, University of Melbourne
- Alison Kelly, Farm Emissions Specialist, Agriculture Victoria
- Professor Manfred Lenzen, Professor of Sustainability Research, University of Sydney
- Dr Di Mayberry, Principal Research Scientist, CSIRO Agriculture and Food



## 3.00pm: Afternoon tea and research showcase





### 3.45pm: Session 3 – Nutrition, science and technology: food facts you need to know

How do we rebalance the Australian food environment, such that science and technology coupled with improved nutrition literacy guide the production of healthier foods with lower environmental impact but without compromising the profitability of the agriculture and food sectors?

Science has shown that nutrition shapes just about every aspect of our biology and health, yet obesity, cardiometabolic and autoimmune diseases and unhealthy eating practices are increasing. Our nutritional biology has been hacked in the modern industrialised food environment and consumer demand is driving agriculture and food production practices to satisfy a market for unhealthy foods.

How has this happened – and what can we do about it?

In this session we will consider uniquely Australian breakthroughs that help answer questions including: What is a healthy balanced diet? How do ultra-processed foods and beverages cause us to eat too much, be unhealthy and age faster? Why are food allergies on the rise? Are fad diets healthy?

#### Presentation

- Associate Professor Severine Navarro, Group Head, Centre for Childhood Nutrition Research, QIMR Berghofer Medical Research Institute

#### Presentation

- Professor Yasmina Sultanbawa, Centre Director, Centre for Nutrition and Food Sciences, Queensland Alliance for Agriculture and Food Innovation (QAAFI)

#### Panel discussion

- Moderator and contributor: Professor Stephen Simpson AC FAA FRS, Academic Director, Charles Perkins Centre, University of Sydney
- Dr Gilly Hendrie, Research Scientist and Leader, Public Health and Wellbeing Group, CSIRO
- Associate Professor Andrew Holmes, Theme Leader (Education) Molecules, Cells and Organisms, Charles Perkins Centre, University of Sydney



### 5.15pm: Closing remarks

#### Wrap up and closing remarks by symposium convenor

- Professor Christine Beveridge FAA, Centre Director, ARC Centre for Plant Success in Nature and Agriculture, University of Queensland

#### Symposium close

- Professor Lyn Beazley AO FAA FTSE, Secretary for Education and Public Awareness, Australian Academy of Science

### 5.30pm: Symposium end





## SPEAKERS AND PANELLISTS

**Professor Christine Beveridge** FAA  
Centre Director, ARC Centre for  
Plant Success in Nature and  
Agriculture, University of  
Queensland



Professor Christine Beveridge is a world leader on the hormonal control of plant development and shoot architecture which underpins the yield, productivity or ornamental value of crops, trees and shrubs. Shoot architecture is controlled by the formation, release and then growth of lateral buds into branches. Christine's work shows that bud release is prevented when sugars are limited, and occurs only when the plant has an excess of sugars. The subsequent growth depends on the right balance of plant hormones. One of these hormones, strigolactone, was discovered through her research on the genetics and physiology of branching mutants.

Christine is a Fellow of the Australian Academy of Science, an ARC Georgina Sweet Laureate Fellow, a Highly Cited Researcher, and past President of the International Plant Growth Substances Association. Christine is a life member of the Australian Society of Plant Scientists.

**Professor Lyn Beazley** AO FAA FTSE  
Secretary for Education and Public  
Awareness, Australian Academy of  
Science



Professor Lyn Beazley's career was as a bio-medical researcher in the field of neuroscience, working on recovery from brain damage. This was followed by her appointment as Chief Scientist of Western Australia from 2006 to 2013 advising the state government on science, innovation and technology.

She continues to promote STEM, a goal boosted when Lyn was named as the WA Australian of the Year in 2015. Lyn is particularly concerned about promoting equity in STEM and pursue her passion for every young Australian to learn and love science. Lyn is proud to be the Secretary for Education and Public Awareness at the Australian Academy of Science.

**Professor Richard Eckard** FTSE  
Director, Primary Industries Climate  
Challenges Centre, University of  
Melbourne



Professor Richard Eckard is Director of the Primary Industries Climate Challenges Centre, University of Melbourne. His research focuses on carbon farming and accounting towards carbon neutral agriculture, managing extreme climate events and options for agriculture to respond to a changing climate.

In 2021, Richard was named on the Reuters list of the world's 1,000 most influential climate scientists and appointed as a Fellow of the Australian Academy of Technological Sciences and Engineering. Richard is a science advisor to the Victorian, Australian, New Zealand, UK and EU governments, the International Livestock Research Institute and the UN Food and Agriculture Organization on climate change adaptation, mitigation and policy development in agriculture. Richard is a member of the Victorian Agriculture and Climate Change (ministerial advisory) Council.

**Adam Fennessy** PSM  
Secretary, Department for  
Agriculture, Fisheries and Forestry



Adam Fennessy has over 25 years of public sector experience at state and federal levels, most recently as the Victorian Public Sector

Commissioner. He has served as the Secretary of the Victorian Department of Environment, Land, Water and Planning, and the Victorian Department of Environment and Primary Industries. Adam has worked in the private sector as a partner with global advisory firm Ernst & Young.

Adam has served on several boards including the Institute of Public Administration Australia (IPAA) (Victoria), Infrastructure Victoria, Monash Sustainable Development Institute and Women & Leadership Australia.

Adam is an IPAA National Fellow and a member of the Champions of Change Coalition. In 2018, he received a Public Service Medal (PSM) for leadership in the Victorian public sector.

**Dr Gilly Hendrie**  
**Research Scientist and Group Leader, Public Health and Wellbeing, CSIRO**

Dr Gilly Hendrie is a Research Scientist within the CSIRO Human Health Program, and leads the Public Health and Wellbeing Group. Her expertise is in understanding dietary intake patterns and developing novel ways to improve our food choices to address key challenges like obesity and environmental sustainability.

Gilly has designed many technology-based interventions to change, support, and monitor dietary behaviour change for health. For example, the CSIRO Healthy Diet Score Survey has been completed by over 230,000 Australians, and she currently leads the scientific evolution of the CSIRO Total Wellbeing Diet Online.



**Associate Professor Andrew Holmes**  
**Theme Leader (Education) Molecules, Cells & Organisms, University of Sydney**

Associate Professor Andrew Holmes has general interests in understanding the role of microbial communities in both human and environmental health. An often-overlooked aspect of host control of microbes is via regulation of intestinal nutrient availability. He has particular interests in the relationship between the availability of food in the environment, how this shapes the behaviour of animals and the role of gut microbes in influencing animal health outcomes.

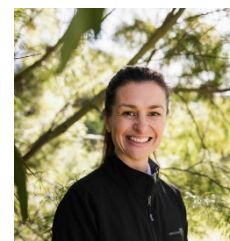
A focus of Andrew's work has been the application of the geometric framework to investigate mechanisms of manipulation of host-microbe interaction in the gut via diet regimes or food supplements. Such understanding is applied in the development of modelling tools that enable the prediction of diet intervention outcomes or can inform development of regulatory guidelines. Andrew is in the School of Life and Environmental Sciences University of Sydney where he is based in the Charles Perkins Centre. He is a Fellow of Food Standards Australia New Zealand (FSANZ).



**Alison Kelly**  
**Farm Emissions Specialist, Agriculture Victoria**

Alison Kelly has over 20 years' experience in national leadership positions working on climate change and environmental issues within the Australian agricultural sector. This includes working with industry and research organisations, such as Dairy Australia, Horticulture Australia and the University of Melbourne, successfully implementing significant environmental and climate research projects for agriculture. She has also held chair and non-executive director roles for a number not-for-profit businesses, including as one of eight chairs of the Horticulture Innovation Australia Ltd Strategic Investment Advisory Panels. In 2023 she was a finalist in the Women's Agenda Leadership Awards as an emerging leader on climate and sustainability.

Alison is currently working as the Farm Emissions Specialist with Agriculture Victoria leading a small but high-impact team working directly with Victorian farmers who want to know, understand and act on their emissions.



**Dr John Kirkegaard** FAA  
**Chief Research Scientist – Farming Systems, CSIRO Agriculture and Food**

Dr John Kirkegaard FAA is a Chief Research Scientist at CSIRO in Canberra and Adjunct Professor at the University of Western Australia and Charles Sturt University. Born in rural Queensland, he received his bachelor degree and PhD in agriculture at the University of Queensland. In 1990 he joined CSIRO in Canberra working on the National Land and Water Care Initiative to develop more productive and sustainable dryland agricultural systems in southern Australia. Over the next 30 years, his research teams and collaborators in Australia and overseas have investigated numerous strategies to improve the productivity and sustainability of dryland agriculture systems. He is a regular invitee to national and international forums and advisory committees on agriculture and food security, and was Visiting Professor at the Crop Science Department, University of Copenhagen in 2012 and 2019.

John's team was awarded the prestigious Eureka Prize in sustainable agriculture for research to improve the water-use efficiency of Australian agriculture in 2014. He was elected a Fellow of the Australian Academy of Science in 2016, was recipient of the Farrer Medal for distinguished contribution to agriculture in 2017 and was a Highly Cited Researcher 2018 to 2022.



**Professor Manfred Lenzen**  
**Professor of Sustainability Research,**  
**University of Sydney**

Professor Manfred Lenzen is Professor of Sustainability Research with the Integrated Sustainability Analysis team in the School of Physics at the University of Sydney. He has a PhD in physics and experience in renewable energy technologies, life-cycle assessment and carbon foot printing. His current research interests focus on the link between environmental/resource impacts and international trade.

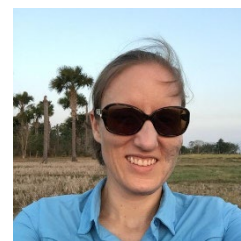
Manfred currently leads the development of cloud-based collaborative research platforms for building large-scale global economic-environmental models that enable environmental impact analysis across global supply chain networks.



**Dr Dianne Mayberry**  
**Principal Research Scientist, CSIRO**  
**Agriculture and Food**

Dr Di Mayberry is a Principal Research Scientist in the Sustainability Program at CSIRO, and works across global, regional and farm scales to future-proof livestock production systems against a range of challenges threatening their long-term viability and social licence to operate. Her expertise contributes to science focused on overcoming the impacts of a changing and variable climate, diminishing resources, changing consumer demands, and pressure from consumers and government to decrease the impact of animal agriculture on the environment.

Di's research portfolio addresses these issues in both Australia and internationally, with projects across the Asia-Pacific and Sub-Saharan Africa.



**Professor Matthew Morell**  
**Institute Director, Queensland**  
**Alliance for Agriculture and Food**  
**Innovation (QAAFI)**

Professor Matthew Morell has had an extensive career focused on leading agricultural research, benefiting both the agricultural and food sectors and consumers. His focus is leadership that develops teams to collaborate to drive future innovations. As Director of QAAFI, he guides researcher collaboration that addresses major global challenges, such as enhancing profitability and sustainability in agriculture, improving nutrition, and mitigating climate change impacts while safeguarding farmer livelihoods. QAAFI's collaboration with stakeholders, including producers, the food industry and government agencies, positions it as a hub for impactful research benefiting Queensland and beyond.

Previously, Matthew served as CEO of the International Rice Research Institute (IRRI), overseeing operations across 17 countries. He prioritised stakeholder needs, expanded the institute's regional presence, and modernised research operations. His tenure at CSIRO saw the development of innovative grain technologies, leading to the formation of successful spin-off companies. With a PhD in agricultural chemistry and extensive postdoctoral experience, Matthew's contributions have been recognised through various fellowships. His commitment to advancing agricultural science and fostering collaborations underscores his significant impact on the field.



**Professor Neena Mitter**  
**Centre Director, Centre for**  
**Horticultural Science, Queensland**  
**Alliance for Agriculture and Food**  
**Innovation (QAAFI)**

Professor Neena Mitter is the Director of the Centre for Horticultural Science, Queensland Alliance for Agriculture and Food Innovation, the University of Queensland and the Director of the Australian Research Council Industrial Transformation Research Hub for Sustainable Crop protection. She has won several awards, has more than 150 publications, multiple patents and has supervised more than 25 PhD students.

Neena is globally renowned for her leadership of innovative platforms, namely 'Environmentally sustainable BioClay platform for crop protection' and 'Clonal propagation of avocado using plant stem cells'. These are ground-breaking platform technologies influencing agricultural production, environmental sustainability and socio-economic dynamics of farming communities. Neena is also championing a UQ wide initiative on protected cropping for tropics and subtropics. With increased scrutiny on the use of chemicals as crop and animal disease control agents, Neena is focused on developing clean technologies for the agriculture of tomorrow.





**Associate Professor Severine Navarro**  
**Group Head, Centre for Childhood**  
**Nutrition Research, QIMR Berghofer**  
**Medical Research Institute**

Associate Professor Severine Navarro leads the Mucosal Immunology Laboratory at QIMR Berghofer. She is Director of Discovery Science at the Centre for Children Nutrition Research QUT, and co-founder of the spin-out company Paragen Bio. Severine has established her career in the development of immunotherapies to enhance immune tolerance. She explores the role of nutrients on the microbiome and metabolome to determine the impact on immune development and identify mechanisms of tolerance breach responsible for disease onset. With expertise in allergy and autoimmune diseases, Severine uses multi-omics (single cell transcriptomics, proteomics, metabolomics and microbiome sequencing) for clinical and pre-clinical projects. She has studied in world-class organisations in the USA, France and Germany.



After postdoctoral training at the Australian Institute for Tropical Health Medicine at James Cook University, Severine discovered and characterised a novel suite of tolerogenic molecules derived from gastrointestinal parasites. She also has expertise in drug development and has worked in partnership with Vifor Pharma, Boehringer Ingelheim, Meril, Takeda and Janssen Pharmaceutical. She has an outstanding publication record in leading academic journals.

**Dr Greg Rebetzke**  
**Chief Research Geneticist,**  
**CSIRO Agriculture and Food**

Dr Greg Rebetzke is an agricultural scientist who is part of a multidisciplinary team with a strong focus on the science and delivery of novel genetics to improve crop resilience with changing climates. He and his team place a particularly strong emphasis on improving crop production and assuring food security in droughted and frost-prone farming systems both in Australia and overseas.



Greg links closely with industry to discover, validate and fast-track the uptake of new understanding and the underlying genetics of key traits to breeding programs, and implement cost-effective, high-throughput phenotyping methods to speed delivery to farmers. Genetic advances and physiological insights reflecting Greg's science are distributed in elite wheat germplasm underpinning new varieties with significant value to the Australian grain industry in both current and future climates.

**Professor David Raubenheimer**  
**Professor of Nutritional Ecology,**  
**Charles Perkins Centre and School**  
**of Life and Environmental Sciences,**  
**University of Sydney**

Professor David Raubenheimer is a leading expert in nutritional ecology, the science of how food environments interact with animals' biology to influence health and ecological outcomes. Over 37 years he and colleagues have studied the nutritional ecology of other species, from insects to wild apes, and used the natural world as a guide for understanding challenges and opportunities in human diets and nutrition.



David will set the scene for the symposium by showing how this work can help us understand how to rebalance the Australian agricultural and food environment, towards healthier diets with lower environmental impact but without compromising the profitability of the agriculture and food sectors. He will end by telling us about a new approach he and colleagues have developed for helping to achieve this rebalancing, which was awarded the 2022 Eureka Prize for Excellence in Interdisciplinary Science.

**Dr Rohan Nelson**  
**Director, Food System Horizons,**  
**University of Queensland and CSIRO**

Dr Rohan Nelson is the Director of Food System Horizons – a joint initiative of the University of Queensland and CSIRO – and brings significant expertise in science-policy engagement to this role. His other expertise includes the institutional design and management of public sector innovation and forecasting systems, and deep knowledge of competition, climate and natural resource management policy.



Rohan is seconded from ABARES where he has been leading a community of Australian and global experts seeking to better integrate agriculture into Australia's food and national innovation systems. He has also been developing novel applications of foresighting to assist policy development. He has previously worked for CSIRO, the Australian Government Department of Climate Change, Land & Water Australia, the Productivity Commission, the Queensland Department of Primary Industries and as Associate Professor of Agricultural Economics and Policy at the University of Tasmania. Rohan has a PhD in agricultural economics from the University of Queensland, and bachelor degrees in economics and forestry from the Australian National University.

**Professor Stephen Simpson** ACFAA FRSS  
**Academic Director, Charles Perkins  
Centre, University of Sydney**

Professor Stephen Simpson is the inaugural Academic Director of the Charles Perkins Centre and Professor in the School of Life and Environmental Sciences at the University of Sydney. After graduating as a biologist from the University of Queensland, Steve undertook his PhD at the University of London, then spent 22 years at Oxford before returning to Australia in 2005 as an Australian Research Council Federation Fellow.

Steve and colleague David Raubenheimer developed an integrative modelling framework for nutritional biology (the Geometric Framework), which was devised and tested using insects and has since been applied to a wide range of organisms, from slime moulds to humans, and problems, from aquaculture and conservation biology to the dietary causes of human obesity and ageing. Steve has also pioneered understanding of swarming in locusts, with research spanning neurochemical events within the brains of individual locusts to continental-scale mass migration. In 2007 he was elected a Fellow of the Australian Academy of Science, in 2013 he was elected a Fellow of the Royal Society of London, in 2015 was made a Companion of the Order of Australia, and in 2022 he was awarded the Macfarlane Burnet Medal of the Australian Academy of Science.



**Professor Wendy Umberger**  
**Chief Executive Officer, Australian  
Centre for International Agricultural  
Research (ACIAR)**

Professor Wendy Umberger is the Chief Executive Officer at the Australian Centre for International Agricultural Research. She has played influential roles in sustainable agriculture for over 20 years. From 2013 to 2022, she founded and led the Centre for Global Food and Resources at the University of Adelaide, which engaged with policymakers and industry to make positive changes in agriculture, food and resource systems. Professor Umberger has also served as president of Australia's Policy Advisory Council for International Agricultural Research and Development from 2020 to 2023 and was on the Board of Trustees of the International Crops Research Institute for Semi-Arid Tropics (ICRISAT) from 2015 to 2021.

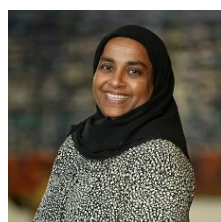
Wendy is an Honorary Professorial Fellow in the School of Agriculture and Food at the University of Melbourne and an expert in agricultural economics, development and food policy. She has worked on food system issues across the Indo-Pacific region and led interdisciplinary value chain research projects in Asia, Australia, North America, the Pacific Islands and South Africa. Her research has explored opportunities for smallholder agricultural households to produce high-value food products in horticulture, dairy and beef, and adopt new technology to access modern food value chains.



**Professor Yasmina Sultanbawa**  
**Centre Director, Centre for Nutrition  
and Food Science, Queensland Alliance  
for Agriculture and Food Innovation  
(QAAFI)**

Professor Yasmina Sultanbawa is the Director of the Centre for Nutrition and Food Sciences, and Director of the Australian Research Council Industrial Transformation Training Centre for Uniquely Australian Foods. She is also a Professorial Research Fellow at Queensland Alliance for Agriculture and Food Innovation (QAAFI) at the University of Queensland. Her research is focused on food processing, preservation, food safety and nutrition.

Drawing on her expertise in process technologies and engineered delivery systems for bioactive compounds, Yasmina spearheaded research initiatives aimed at enhancing nutrition, flavour, quality and food safety. Her collaborative efforts with food industries have yielded commercially applicable solutions, addressing challenges and seizing opportunities across the agrifood value chain. Her pioneering work on Australian native plant foods has not only promoted the incorporation of these plants into mainstream agriculture but has also fostered diet diversification and sustainability. Moreover, her collaborative endeavours with First Nations communities have led to the development of nutritious and sustainable value-added products, empowering these communities while simultaneously benefiting the food and beverage industry.



**Professor Kerrie Wilson**  
**Queensland Chief Scientist**

Professor Kerrie Wilson commenced in the role of the Queensland Chief Scientist in November 2023. Her distinguished career encompasses roles at QUT, including Pro Vice-Chancellor (Sustainability and Research Integrity), and her tenure as the Executive Director of the QUT Institute for Future Environments. She is one of Australia's leading researchers into the science, strategy and policy of conservation. With a track record in key leadership roles and driving collaboration with national and international stakeholders, she will ensure Queensland remains at the forefront of science.

Before joining QUT in 2019, Kerrie was the Director of the Australian Research Council (ARC) Centre of Excellence for Environmental Decisions and an ARC Future Fellow at the University of Queensland. She is also an Affiliated Professor in Conservation Science at the University of Copenhagen, a member of the Australian Heritage Council, and previously a member of the Reef 2050 Plan Independent Expert Panel. Kerrie has held leadership positions including Director of Conservation for The Nature Conservancy Australia and the Australian Natural Sciences Commissioner for UNESCO. She has received numerous awards, including the Prime Minister's Prize for Life Scientist of the Year, the Australian Academy of Science Nancy Millis Medal for Women in Science, two ARC Research Fellowships and an Australian Museum Eureka Prize for Outstanding Young Researcher.





## EVENT PARTNERS

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