

# AIFST23 Speaker Profiles DAY 2 Tuesday 25<sup>th</sup> July 2023

Dr John Whittle, CSIRO Data61 - Director

AI and Responsible Innovation

This talk will cut through all the hype around Artificial Intelligence. Learn about what AI really is, and what it is not. Learn about the opportunities that AI presents to disrupt all industry sectors, but also the risks involved. And learn about some of the exciting developments in applying AI to food security and sustainability. Join AI expert, Dr. Jon Whittle, host of CSIRO's Everyday AI podcast, to get the real deal on AI.

Jon Whittle is Director of CSIRO's Data61, the digital and data sciences arm of Australia's national science agency. With over 800 staff and affiliates, Data61 is one of the largest collections of R&D expertise in Artificial Intelligence and Data Science in the world. Data61 partners with over 200 industry and government organisations, over 30 Universities, and works across vertical sectors in manufacturing, agriculture, and



the environment. Prior to joining Data61, Jon was Dean of the Faculty of Information Technology at Monash University, the largest university in Australia. He was named CEO Magazine's 2019 Education Executive of the Year. Jon is also a former Technical Area Lead at NASA, where he worked on AI software for NASA space missions. Jon has a PhD in Artificial Intelligence from the University of Edinburgh, UK.



#### Katherine Gokavi-Whaley, Yume - CCO

#### Sustainability Panel

Having worked extensively across the food industry for more than 20 years, Katherine Gokavi-Whaley knows that we need a new vision for our food systems combined with innovation, to spark real change. Seeing problems and opportunities in colour, not black and white, is the secret to her success in scaling the efforts of food organisations across hospitality, food rescue and now, the social enterprise sector. A digital disruptor, Katherine leads Yume's team of tech driven food waste fighters to implement surplus food colutions within Australia's loading f



implement surplus food solutions within Australia's leading food manufacturers.

Passionate about food for all, living sustainably and helping craft solutions that support a circular economy, Katherine is motivated by impact businesses that deliver. To date, Yume has redistributed 5.5 million kilograms of food to businesses and charities and returned over \$15M back to businesses.



Rose Gooding, Goodman Fielder – Sustainability Lead

#### Sustainability Panel

Rose is the Sustainability Lead at Goodman Fielder - a leading global food company committed to making everyday food better for everyone, and home to some of Australia's most loved and trusted household brands including Helga's, Wonder, Praise, Pampas and White Wings.

With experience delivering sustainability and social initiatives within communities across Fiji and Timor-Leste, since 2021 Rose has been working within the FMCG



industry, managing Goodman Fielder's governance and tracking of the sustainability program, as well as leading the specific streams of emission reduction, food waste, social impact and Indigenous Recognition. Rose collaborates daily with employees and leaders to embed sustainability across all functions within Goodman Fielder; ensuring they reach their sustainability ambitions under their Better Together sustainability strategy.

Rose's background is a Bachelor of Economics and Bachelor of Commerce – International Business. She is passionate about creating real and accelerated change across sustainability performance, particularly in the areas of climate change, food waste, and community impact.



Mark Harry, MARS Food Australia – R&D Director

#### Sustainability Panel

Mark is a career Martian, having spent time in both the MARS Petcare and MARS food businesses in various roles from Brand management through to all aspects of Research & Development

He has found his true passion however in packaging sustainability and the role that a large scale manufacturer can have on the environment and creating a true circular economy within Australia.





**Professor Sally Gras,** Redmond Barry Distinguished Professor and Deputy Director Plants for Space Centre of Excellence

#### Plants for space and sustainability on earth

This presentation will introduce The ARC Centre of Excellence in Plants for Space, which aims to create on-demand, zero-waste, high-efficiency plants and plant products to address grand challenges in sustainability for Space and on Earth. Significant advances in plant, food, and sensory science; process and systems engineering; law and policy; and psychology are expected to deliver transformative solutions for Space habitation – and create enhanced plant-derived food and bioresources to capitalise upon emergent and rapidly expanding domestic and global markets. Anticipated outcomes include industry uptake of innovative plant forms, foods and technologies.

Professor Sally Gras is a Redmond Barry Distinguished Professor at The University of Melbourne and Deputy Director of the ARC Centre of Excellence Plants for Space (2023 – 2030), led by the University of Adelaide.

Professor Sally Gras is currently Director of the ARC Digital Bioprocess Development Hub (2022 – 2027), Dairy Innovation Hub (2020 – 2023) and the Faster, Smarter Pharma & Food Manufacturing Program (2021 – 2023) at The University of Melbourne.



Sally Gras is a Professor in the Department of Chemical Engineering at The University of Melbourne where she teaches Biochemical and Pharmaceutical Engineering. Prof Gras is also Leader of the Food and Agribusiness research theme within the University's Melbourne School of Engineering and Associate Director of the Bio21 Molecular Science and Biotechnology Institute where she leads a multi-disciplinary research group. Sally trained as a Chemical Engineer and Molecular Biologist and received her PhD in protein biophysics from Cambridge University, U.K.



#### Professor Michelle Colgrave, CSIRO - Professor of Food and Agricultural Proteomics

#### Food science for the future panel

Michelle Colgrave is a Professor of Food and Agricultural Proteomics, a chief investigator on the ARC Centre of Excellence for Innovations in Peptide and Protein Science and the Future Protein Mission Leader in CSIRO Agriculture and Food, based at the Queensland Bioscience Precinct in Brisbane, Australia. The Future Protein Mission will grow Australia's protein industry by \$10b by 2027. The scope of the mission is centred on principles of sustainable growth delivering high quality, affordable and nutritionally optimized protein for Australia. It will develop protein-based industries along the full value chain from production to the customer,



delivering premium protein ingredients and products, addressing the rapid growth of the proteinbased sector. Including plant-based protein, traditional protein, insect protein and microbes such as yeast that can create wealth from waste, the mission will transform low or no value side-streams through advanced biomanufacturing.



Professor Mark Turner, University of Queensland - Professor of Food Microbiology

#### Food science for the future panel

Mark is a Professor of Food Microbiology and Deputy Head of the School of Agriculture and Food Sciences at the University of Queensland. He leads a research team in the area of food fermentation, quality and safety with current funding from the Australian Research Council. His current research focus is in lactic acid bacteria physiology (stress signalling) and applications (plant-based dairy alternatives, cheese cultures, anti-fungal and antipathogen biocontrol). He teaches into food microbiology, food safety and food biotechnology courses at UQ and is a Fellow of the ASM and AIFST as well as a member of the



editorial boards of mBio and Journal of Food Protection. He was the recipient of the 2017 AIFST Keith Farrer Award of Merit.



Dr Jordi Nelis, CSIRO – Researcher

*Micro and nanoplastics in our food chain. How serious is it and what should be done about it?* 

The presentation will discuss how micro and nanoplastic pollution can affect global food safety and food security. I will also look at the research gaps that need to be filled to create a sufficiently large evidence base to enable the establishment of safe plastic limits in our food and discuss the analytical equipment and techniques that require further development to enable such research.

Dr. Joost (Jordi) Nelis obtained a BSc. in general Biology at the University of Antwerp in Belgium and a MSc. in Biotechnology specializing in Proteomics and Mass Spectrometry. He later joined a H2020 Marie Curie project for his PhD in analytical biochemistry at Queen's University Belfast (UK). During his PhD Jordi developed various smartphone-hyphenated biosensors for the detection of food contaminants utilizing electrochemical, colorimetric and plasmonic transducers. After his PhD Dr. Nelis joined the Commonwealth Scientific and Industrial Research Organization of Australia (CSIRO). At CSIRO his research focusses on integrating mass spectrometry and novel data science workflows with cutting edge portable sensors to enable automated, in-situ credential verification and food contaminant



detection. Dr. Nelis is passionate about doing research that contributes to a better and sustainable future and his intense research activity has resulted in the publication of 22 peer-reviewed publications in high impact factor journals and one patent. Dr. Nelis currently leads several interdisciplinary initiatives that aim to solve complex challenges and generate measurable impact in the global food security and biosecurity sectors by providing fit-for-purpose sensing solutions.



Ian Hayes, Australian Packaging Covenant Organisation – Head of Packaging Transformation

#### Sustainable Packaging Design

Packaging is required to contain and protect products and ensure the safety of consumers. This presentation will discuss the challenges and opportunities in ensuring we deliver more sustainable packaging outcomes without compromising on the promise of product and consumer safety.

Ian Hayes is Head of Packaging Transformation with the Australian Packaging Covenant Organisation. Ian has worked in packaging development within the food, consumer healthcare and pharmaceutical industries for more than 30 years across the Asia Pacific region, Australia, Singapore, Germany, Saudi Arabia and the UK. Ian brings a global understanding of packaging development and the interaction of packaging and the environment. He was made a Fellow of the Australian Institute of Packaging in 2008 and has been involved on multiple packaging related industry committees and associations.





Sam Oakden, Stop Food Waste Australia - Head of the Australian Food Pact

Too good to waste: the case for food waste action

What would an Australia without food waste look like? A more sustainable, resilient and circular food system for one, no Australian going hungry, up to 3400 new circular economy jobs, innovative new upcycled products and nearly 20MT of GHG emission savings. Solutions to end food waste exist and everyone can get involved.

Sam is the Head of the Australian Food Pact at Stop Food Waste Australia, The Pact is a pre-competitive collaboration to make Australia's food system more sustainable, resilient, and circular. It's a multi-year commitment by the businesses who grow, make and sell our food to develop solutions and implement change at scale. In 2022 he was awarded the inaugural emerging circular economy leader award in the Planet Ark Australian Circular Economy Hub awards.



Sam has an agricultural science background and has worked on the implementation of the Australian National Food Waste Strategy since early 2018.



Chris Hutton, Mars Wrigley - R&D Director, Australia & Asia

Paper-Based Wrappers for Chocolate Bars: The Mars Story

In a world first, Mars Wrigley Australia has begun transitioning all their Australian made chocolate bars to paper-based wrappers, making them the first chocolate bars in the country to be available nationwide in recyclable wrappers. In this presentation we will share the journey and insights gained from this breakthrough innovation and discuss what the challenges and opportunities faced by industry as we move towards a circular economy.

As Research & Development Director for the Australia and Asia business units, Chris leads a diverse team of scientists and engineers delivering the R&D, Sustainability and Quality & Food Safety programs at Mars Wrigley; the maker of iconic products across the snacking category including Mars<sup>®</sup>, Snickers<sup>®</sup>, M&Ms<sup>®</sup>, Maltesers<sup>®</sup>, Extra<sup>®</sup> Gum, Skittles<sup>®</sup> and Eclipse<sup>®</sup> Mints.

Chris joined Mars Australia as a Graduate in 2011 and has gone on to hold various leadership roles across Product and Packaging Innovation and Quality and Food Safety within all segments of the Mars business (Mars



Petcare, Mars Food and Mars Wrigley), before taking on his current role in early 2020.

Leading Mars Wrigley's Sustainable Packaging Agenda, Chris is passionate about unlocking sustainable solutions through innovation.



Dr Simon Dunstall, CSIRO Data61 – Principal Research Scientist

Practical robotics, sensing and AI in food production and processing.

Food production, processing and logistics has much to gain from further adoption of robotics, automation, sensing and AI. Many of the relevant technologies are maturing and becoming more natively interoperable, however the complexity and variety can be overwhelming. Sourcing or building the capability to develop and maintain solutions can also be very challenging. The aim is this presentation is to demystify some of the technology concepts and to highlight sources of advice and assistance especially from open development communities.

Dr Simon is presently a co-leader of the CSIRO "Future Digital Manufacturing Fund" (FDMF). FDMF is concerned with the integration of digital and manufacturing technologies to enable more competitive, flexible and resilient manufacturing industries. Industry4.0 concepts are central to FDMF. He is also an active researcher in bushfire risk and firefighting, including the impacts of fire on forestry, food and electricity systems, and is a fellow of the Modelling and Simulation Society of Australia and New Zealand.





Colin Gudgeon, Dassault Systèmes – Senior Client Executive

Virtual Twins: the accelerator to Food manufacturing Sustainability

Companies are performing ambitious transformation programs to New Food: new ingredients, new processing techniques, new equipment. Consumer expectations in Personalized Traditional products require massive Manufacturing Transformation. Sustainability and Circularity in those Manufacturing Transformations are an absolute mandate. Pushed by consumers, companies are highly pressured to transform.

In this session, you will learn how Virtual Twins can accelerate food-manufacturing transformation by modeling the food production system combining AI/ML Data and Scientific Models.

What if the Twin could reveal new Processing methods opportunities? What if the Twin could speed-up Scale-up? What if your Production could learn and adapt autonomously with the Twin?

Colin is a Senior Client Executive for Dassault Systèmes, based out of Melbourne. Dassault Systèmes is a scientific, technology company that develops 3DExperience solutions to harmonize Products, Nature and Life.

Originally from North West England and an industrial chemist by trade, Colin worked in oilfield services for over 20 years, initially in the speciality chemicals area, travelling to



many regions of the globe working with major international and national oil companies, later moving into account management and commercial management.

Colin made the move into industrial software in 2015 with GE Digital and then AVEVA, covering manufacturing solutions to the CPG/F&B and general manufacturing segments, prior to moving to Dassault in early 2022. At Dassault, Colin covers a number of major clients across industries, including CPG-Retail, working with clients to address key transformational and innovation needs to bridge the "Virtual and Real" world. In the CPG and Retail segment in Australia, Colin's portfolio includes CPG-Retail customers where Dassault's solutions provided sophisticated supply chain optimization to critical aspects of their business.



Prashant Singh, Tetra Pak – APAC Services Portfolio Manager

Remote support, connected workforce and asset health monitoring

Digital solutions in smart manufacturing help companies take cost out of their operations and drive operational excellence at scale; while at the same time enhance the physical experience consumers have with their products to drive growth in market share. Combined together, these digital solutions help companies drive digital transformation of their business and become future ready.

Seasoned Sales, Portfolio & Product Managment professional with experience across Asia Pacific in Packaging & Technical Services. Prashant started his journey with innovating for Food and Dairy companies through Product Development of dairy & fruit-based beverages. Post MBA, moved to Packaging Solutions Business Development & Sales. Leading the largest Key Account for Tetra Pak South Asia Markets for 7 years. Entered into Product Management for Tetra Pak's Packaging Portfolio in South Asia East Asia & Oceania region. 4 years back took over the entire Services Portfolio team for Tetra Pak in Asia Pacific region leading Services Product Deployment & Development initiatives in the region. Working with new age digital technologies of Machine Learning, Asset Health Monitoring, Remote Support & Anytime learning etc.





#### Dr Sandra Cuthbert, FSANZ - CEO

Sandy Cuthbert is the Chief Executive Officer of Food Standards Australia New Zealand (FSANZ). She previously worked in the Department of the Prime Minister and Cabinet, the Department of Finance and the Department of Agriculture, Fisheries and Forestry. Sandy holds post graduate qualifications in science and law and before joining the public service she worked as a veterinarian. She has two fabulous children and one very poorly trained border collie.





Kelly Joy, Department of Health - Senior Manager, Food Safety Unit

Kelly holds a Bachelor of Agriculture from the University of Adelaide's Faculty of Sciences and has completed post graduate studies in Human Nutrition at Deakin University. Kelly is recognised as a qualified nutritionist by the Nutrition Society of Australia (NSA), is a professional member of the Australian Institute of Company Directors (AICD) and the Australian Institute of Food Science and Technology (AIFST). Having worked in the wine industry early in her career, much of Kelly's career has been as a public servant in agricultural biosecurity and more recently food safety. Kelly currently leads the Food Safety Unit at the Victorian Department of Health and represents Victoria on the bi-national Food Regulation Standing Committee (FRSC). In her spare time Kelly enjoys tending her rose garden and walking with her small terrier dogs.





Dr Angeline Achariya, Simplot Australia – Executive Director, Global Innovation & Growth

Food Vision 2030: Savouring the Future Feast

In the presentation, "Savouring the Future Feast," we embark on an exciting journey into the realm of futuristic food. As the world faces mounting challenges in sustainability, climate change, and population growth, it becomes imperative to explore innovative and sustainable solutions to feed the future. We delve into cutting-edge technologies that hold the promise of revolutionizing our food systems. Additionally, we uncover the potential of alternative protein sources, insect-based cuisine, and personalized nutrition. Through this immersive experience, we aim to ignite your imagination, provoke curiosity, and inspire you to embrace the delicious and sustainable future that lies ahead. Get ready to savour the flavors of tomorrow!

Angeline is a globally recognized industry executive and innovation leader with 25+ years of international experience. As Executive Director of Simplot Australia and Australia Chair AgriFood Innovation for G100: Mission Million, she showcases her strong commercial acumen. She provides oversight, foresight, and insight on industry, government, and academic advisory boards. Angeline's impressive career includes leadership roles in renowned companies such as Mondelez International, Yum Brands, Fonterra, and MARS. Notably, she co-led the



development of the world's first stand-alone industry shared venture, the Food Innovation Hub, during her time at Mondelez International. This groundbreaking initiative accelerated and de-risked innovations for domestic and Asian markets, now operated by Monash University. Throughout her career, Angeline has successfully led teams in innovation, strategy development, market expansion, R&D, Quality, Regulatory, and Packaging functions. Her expertise has resulted in the launch of over 1000 innovations in FMCG, FS & QSR retail channels across APAC markets.

Raised on her grandparents' farms, Angeline developed a deep passion for agriculture and food. She is dedicated to leveraging her leadership and experience to create a more sustainable and connected global food system. Her focus lies in advancing Australia's role in connecting agrifood to produce value-added products that meet consumer demands. In addition to her executive responsibilities, Angeline actively supports the agrifood sector through advisory, advocacy, mentoring, and public speaking engagements. Her expertise in commercializing agri-food innovation, shaping the future of food, and establishing export pathways for Australian food into Asia has gained international recognition.

Angeline's journey inspires others to pursue their passions, make a positive impact, and contribute to a more sustainable and connected world.

Australian Institute of Food Science & Technology (AIFST)

PO Box 780, Cherrybrook NSW 2126



Greg Holden, Bega Dairy and Drinks – Science & Technology Manager

Dairy vs Plant... a balancing act

The presentation aims to explore the reason for plant milks as competitors to dairy, the challenges of plant milks and the role they play in a sustainable and secure food system.

Greg Holden has 27 years' experience in the food industry, most of it in the dairy industry with National Foods, Lion Dairy & Drinks and now with Bega. Much of Greg's career has been in product development, process optimisation and technical leadership roles. In the several years Greg has been focussed on science and technology advancement and building business capability for breakthrough innovation fostering external collaborations with knowledge leaders from industry, and experts from academia. Greg has a food science



(microbiology) degree and an MBA (Technology Management) as the foundation of his skills.



**Professor Yasmina Sultanbawa,** The University of Queensland – Director, Centre for Nutrition and Food Sciences

#### Nutrient dense plant-based foods for dietary diversification

The current global food system is not viable in terms of health, affordability and environment. Triple burden of malnutrition is leaving billions of people with over consumption or under consumption and nutrient deficiency due to repeated consumption of energy dense poor nutrient foods. The world has over 6000 different plant species cultivated for food, however, just nine of them contribute around 66% of total crop production. To bring about change it would require a radical transformation of the food system. The goal of dietary diversification is to improve the diversity and number of nutrient-dense foods in the diet.

Professor Yasmina Sultanbawa: Director, Centre for Nutrition and Food Sciences, Director, Industrial Transformation Training Centre for Uniquely Australian Foods and a Professorial Research Fellow at Queensland Alliance for Agriculture and Food Innovation (QAAFI), the University of Queensland, Australia.

Her research is focused in the areas of food processing, preservation, food safety and nutrition. She brings together a unique combination of research areas combining process technologies and engineered delivery systems for bioactive



compounds to improve nutrition, flavour, quality and food safety. This work has provided commercially applicable solutions to address challenges and opportunities throughout the agri-food value chain. She has worked closely with food industries and developed research partnerships through contract research with commercial entities. This approach has been highly translational in transforming industry practices for the ultimate benefit of human health. Her work on Australian native plant foods is focused on incorporating these plants in mainstream agriculture and diet diversification and working with First Nations communities to develop nutritious and sustainable value-added products for use in the food and beverage industry.



**Dr Emma Beckett,** Nutrition Research Australia & University of Newcastle – Food & Nutrition Scientist

#### The future of food is in the eating

The future of food presents many opportunities with changes in technology, markets, and scientific knowledge. Ultimately the future of food is in the eating - because food isn't really food, and it certainly isn't nutrition until we eat it. We will explore the challenges & opportunities to engage consumers on this journey.

Dr Emma Beckett is a Food & Nutrition Scientist and communicator. As a scientist, academic, media personality and person generally her mission is to be a knowledge-based change maker to help promote a better world through food.

Ms Frizzle of food and nutrition science - You can find her in the lab, classroom, media or socials. Emma believes knowledge should be shared, and her aim is to empower people to interpret nutrition information so that they can make informed choices about food.



She has won several research and communications awards, including being named as a NSW Young Tall Poppy in 2017.