

# GLOBAL AGRI-FOOD SCIENTIFIC SYMPOSIUM

27 OCTOBER 2022 | THURSDAY 9.00AM - 6.00PM

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## PROGRAMME AGENDA

8:30 AM - 9:00 AM	<b>Registration</b>
9:00 AM - 9:10 AM (10 min)	<b>Opening Address by Dr Koh Poh Koon</b> <i>Senior Minister of State, Ministry of Sustainability and The Environment and Manpower</i>
9:10 AM - 9:25 AM (15 min)	<b>Science and Technology Roadmap Towards a Food Resilient Future by Dr Ngin Hoon Tong</b> <i>Senior Director of Science and Technology Division and Chief Technology Officer, Singapore Food Agency</i>

## THEME 1: RESILIENT AND SUSTAINABLE URBAN FOOD SYSTEMS

9:25 AM - 9:50 AM (25 min)	<b>Keynote</b> <b>1) New knowledge on the ecosystem role of bacteria to make intensive aquaculture more sustainable</b> <i>Prof Patrick Sorgeloos, Emeritus Professor of Aquaculture at Ghent University</i>
9:50 AM - 10:15 AM (25 min)	<b>Keynote</b> <b>2) The power of plant genetics technologies to build sustainable and efficient urban food production systems</b> <i>Dr Nitza Kardish, CEO Trendlines Pte Ltd</i>
10:15 AM - 10:40 AM (25 min)	<b>Tea Break</b>
10:40 AM - 11:00 AM (20 min)	<b>Technical Presentation</b> <b>1) Genetic Improvement of Indoor Farming Crops</b> <i>Prof Yu Hao, Provost Chair Professor &amp; Head of the Department of Biological Sciences, National University of Singapore (NUS)</i>
11:00 AM - 11:20 AM (20 min)	<b>Technical Presentation</b> <b>2) Vertical Farming – The sky is the limit?</b> <i>Prof Leo Marcelis, Head of the Chair Group Horticulture and Product Physiology at Wageningen University (WUR)</i>
11:20 AM - 11:40 AM (20 min)	<b>Technical Presentation</b> <b>3) The Role of Encapsulation &amp; Delivery Systems in Advancing Singapore Aquaculture Plan</b> <i>Prof Joachim Loo, Associate Professor in School of Materials Science and Engineering (MSE), Nanyang Technological University (NTU)</i>

<p><b>11:40 AM - 12:00 PM</b> (20 min)</p>	<p><b>Technical Presentation</b></p> <p><b>4) How microorganisms contribute to a resilient aquaculture environment?</b> <i>Prof He Jianzhong, Professor in the Department of Civil and Environmental Engineering at the National University of Singapore (NUS)</i></p>
<p><b>12:00 PM - 1:00PM</b> (1 hour)</p>	<p><b>Panel Discussion</b></p> <p><b>Sustainable Use of Planet’s Resources to Deliver Nutrient-dense Food –</b> What is the role of technology in crops/fish improvement and farming system efficiency?</p> <p><b>1) Prof Hong Luo</b> <i>Professor of Genetics and Biochemistry, Clemson University</i></p> <p><b>2) Prof Leo Marcelis</b> <i>Head of Chair Group Horticulture and Product Physiology at Wageningen University (WUR)</i></p> <p><b>3) Prof Roberto Parra</b> <i>Research Professor at Tec Monterrey</i></p> <p><b>4) Prof Yu Hao</b> <i>Provost Chair Professor &amp; Head of the Department of Biological Sciences, National University of Singapore</i></p> <p><b>Moderator: Dr Azlinda Anwar</b> <i>Director (Grants &amp; IP Administration) and Coordinating Director, Temasek Life Sciences Laboratory (TLL)</i></p>
<p><b>1:00 PM - 2:10 PM</b> (1 hour 10 min)</p>	<p><b>Lunch &amp; Networking</b></p>
<p><b>THEME 2: TRANSFORMATION OF FOOD FUTURE SYSTEM</b></p>	
<p><b>2:10 PM - 2:35 PM</b> (25 min)</p>	<p><b>Keynote</b></p> <p><b>1) Supercharging the Global Food Bowl with Alternative Protein Solutions</b> <i>Dr Maryann Augustin, Chief Research Scientist from Commonwealth Scientific and Industrial Research Organization (CSIRO)</i></p>
<p><b>2:35 PM - 3:00 PM</b> (25 min)</p>	<p><b>Keynote</b></p> <p><b>2) Asia’s sustainable food policy strategy and the role of alternative protein science</b> <i>Ms Doris Lee, CEO of GFI Consultancy (GFIC)</i></p>
<p><b>3:00 PM - 3:20 PM</b> (20 min)</p>	<p><b>Technical Presentation</b></p> <p><b>1) Alternative Protein Development Platform (APDP): From lab to pilot scale</b> <i>Dr Melanie Weingarten, Director of Biotransformation Department at the Singapore Institute of Food and Biotechnology Innovation (SIFBI), A*STAR</i></p>
<p><b>3:20 PM - 3:40 PM</b> (20 min)</p>	<p><b>Technical Presentation</b></p> <p><b>2) Effects of microbial transglutaminase on the functional and structural properties of brown rice and pea protein isolate blends</b> <i>Dr Du Juan, Assistant Professor in the Department of Food Technology, Singapore Institute of Technology (SIT)</i></p>



<p><b>3:40 PM - 4:10 PM</b> (20 min)</p>	<p><b>Tea Break</b></p>
<p><b>4:10 PM - 4:30 PM</b> (20 min)</p>	<p><b>Technical Presentation</b></p> <p><b>4) The state of art in global cultivated meat research</b> <i>Dr Deepak Choudhury, Research Scientist &amp; Group Leader of Biomanufacturing Technology at BTI, A*STAR</i></p>
<p><b>4:30 PM - 4:50 PM</b> (20 min)</p>	<p><b>Technical Presentation</b></p> <p><b>5) Development of Cultivated Adipocytes from Fish Species as Alternative Fat</b> <i>Dr Shigeki Sugii, Principal Investigator at the Institute of Molecular and Cell Biology (IMCB), A*STAR</i></p>
<p><b>4:50 PM - 5:50 PM</b> (1 hour)</p>	<p><b>Panel Discussion</b></p> <p><b>Building an effective scientific innovation ecosystem for future food:</b></p> <ul style="list-style-type: none"> <li>- When it comes to future food systems in the Asia Pacific, how can international scientific collaboration be best supported and utilized?</li> <li>- What types of partnerships needs to be formed, what are the major barriers currently, and where are the biggest potential wins?</li> </ul> <p><b>1) Dr Iris Haberkorn</b> <i>Senior Scientist at Singapore-ETH Centre</i></p> <p><b>2) Mr Mathys Boeren</b> <i>CEO of Nurasa</i></p> <p><b>3) Prof Michelle Colgrave</b> <i>Head of the Future Proteins Mission at Australia's CSIRO</i></p> <p><b>4) Dr Raffael Osen</b> <i>Group Leader Food Process Engineering at SIFBI, A*STAR</i></p> <p><b>Moderator: Dr Susanna Leong</b> <i>Vice President (Applied Research) at Singapore Institute of Technology (SIT)</i></p>
<p><b>5:50 PM - 6:00 PM</b> (10 min)</p>	<p><b>Closing Address by Prof William Chen</b> <i>The Michael Fam Chair Professor in Food Science and Technology, Nanyang Technological University (NTU) Director of Singapore Agri -food Innovation Lab (SAIL)</i></p>

**END OF SYMPOSIUM**