

## ISNFF 2025 PROGRAMME AT A GLANCE

|               | 14 September / Sun | 15 September / Mon               | 16 September / Tue                             | 17 September / Wed                             |
|---------------|--------------------|----------------------------------|--|--|
| All day       |                    | Registration                     | Registration                                   | Registration                                   |
| 08:30 - 09:00 |                    | Opening Ceremony                 |  | ISNFF 2026 Conference Induction                |
| 09:00 - 10:30 |                    | PL1<br>PL2<br>PL3                | PL4<br>PL5<br>PL6                              | PL7<br>PL8<br>PL9                              |
| 10:30 - 11:00 |                    | Nutrition Break / Poster Session | Nutrition Break / Poster Session               | Nutrition Break                                |
| 11:00 - 13:00 |                    | S1      S2                       | S7      S8                                     | S13 (Flash Talk Presentation)      S14         |
| 13:00 - 14:00 |                    | Lunch provided                   | Lunch provided<br>AGM Meeting (Lunch provided) | Lunch provided                                 |
| 14:00 - 16:00 |                    | S3      S4                       | S9      S10                                    | S15      S16                                   |
| 16:00 - 16:30 | Registration       | Nutrition Break / Poster Session | Nutrition Break / Poster Session               | Nutrition Break                                |
| 16:30 - 18:30 |                    | S5      S6                       | S11      S12                                   | S17      S18                                   |
| 18:30 - 19:30 |                    |                                  |  | Closing and Student Competition Award Ceremony |
| 20:00 - 23:00 | Free time          | Welcoming of participants        | Free time                                      | Gala Dinner*                                   |

\* ISNFF and Fellow Award Winners will be announced at the Congress Gala Dinner, which will be a ticketed event.

**AGM:** Annual General Meeting of ISNFF (restricted to Professional Members of ISNFF).

**PL (1-9):** Plenary (30 min each presentation including questions).

**S (1-18):** Session (20 min each presentation including questions).

| ROOM A  | ROOM B  |
|---|---|
| <b>Session 1:</b> Polyphenols, their Metabolites, Antioxidant, and Health - 1               | <b>Session 2:</b> Proteins and Bioactive Peptides - 1   |
| <b>Session 3:</b> Upcycling and Zero Waste Processing of Food - 1<br>IUFoST & ISNFF Session | <b>Session 4:</b> Proteins and Bioactive Peptides - 2   |
| <b>Session 5:</b> Fermented Food and Beverages, Food, and Health                            | <b>Session 6:</b> Proteins and Bioactive Peptides - 3   |
| <b>Session 7:</b> Polyphenols, their Metabolites, Antioxidant, and Health - 2               | <b>Session 8:</b> Proteins, Bioactive Peptides, Extraction, and Digestion                       |
| <b>Session 9:</b> Upcycling and Zero Waste Processing of Food - 2<br>IUFoST & ISNFF Session | <b>Session 10:</b> Food Production, Processing (Including Ultra-Process), Nutrition, and Health |
| <b>Session 11:</b> Functional Lipids, Omega-3, and Dietary Supplement                       | <b>Session 12:</b> Traditional and Novel Approaches for Bioavailability Improvement             |
| <b>Session 13:</b> Flash Talk Session   | <b>Session 14:</b> R&D of Functional Foods, Nutraceuticals, and Dietary Supplements             |
| <b>Session 15:</b> Functional Carbohydrate, Controlled-Release, and Bioactive Valorization  | <b>Session 16:</b> Spices, Fruits/Vegetables, Nuts, Microbiome                                  |
| <b>Session 17:</b> Analytical Methods, Molecular Docking Combined with Cereals and Legumes  | <b>Session 18:</b> Marine and Aquaculture Products, Carotenoids, and Regulation                 |



## PLENARY SPEAKERS

**Moderators:**

Fereidoon Shahidi (Memorial University of Newfoundland, Canada)

Nguyen Vu Hong Ha (International University, Vietnam National University, Vietnam)

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|------------|------|---|
| <b>PL1</b> | 1077 | Upcycling of Food Processing Discards and Generation of Functional Food Ingredients and Nutraceuticals<br><b>Fereidoon Shahidi</b> - Memorial University of Newfoundland (Canada) |
| <b>PL2</b> | 1056 | R&D Roadmaps and Ecosystem for Successful Functional Food Products<br><b>Pavinee Chinachoti</b> - IUFoST President-Elect (Thailand)   |
| <b>PL3</b> | 1063 | Bioprocessing Blueprints and Marine Bioproducts<br><b>Colin J. Barrow</b> - Deakin University (Australia)   |

**Moderators:**

Cesarettin Alasalvar (TÜBİTAK MAM, Türkiye)

Jianping Wu (University of Alberta, Canada)

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| <b>PL4</b> | 1044 | Bioavailability of Polyphenol Metabolites-Conjugate are Active or Inactive?<br><b>Toshiro Matsui</b> - Kyushu University (Japan)                                  |
| <b>PL5</b> | 1059 | Multifunctional Food Bioactive Peptides for Cardiovascular Disease Prevention: Challenges and Perspectives<br><b>Carmen Lammi</b> - University of Milan (Italy)   |
| <b>PL6</b> | 1192 | Nutritional Lipids: Trends of Research and Market Development<br><b>Xuebing Xu - Wilmar (Shanghai) Biotechnology Research and Development Center Ltd. (China)</b> |

**Moderators:**

Ronald B. Pegg (University of Georgia, USA)

Tien Nguyen (International University, Vietnam)

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| <b>PL7</b> | 1057 | Reduction of Oxalates: Should Physical, Chemical, or Biological Approaches be Chosen?<br><b>Nguyen Vu Hong Ha</b> - International University, Vietnam National University (Vietnam) |
| <b>PL8</b> | 1095 | Valorization of Flounder Fish By-Products from Filet Processing into Functional Food Ingredients<br><b>You-Jin Jeon</b> - Jeju National University (Republic of Korea)              |
| <b>PL9</b> | 1090 | Resistant Starch Formation and Application for Low-Carb Food Production<br><b>Pham Van Hung</b> - International University, Vietnam National University (Vietnam)                   |

## ORAL PRESENTATIONS

### September 15, 2025 (Monday)

#### Session 1: Polyphenols, their Metabolites, Antioxidant, and Health - 1

##### **Moderators:**

Jerzy Zawistowski (University of British Columbia, Canada)

Petras Rimantas Venskutonis (Kaunas University of Technology, Lithuania)

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|-----------|------|---|
| <b>O1</b> | 1089 | Nanotechnology and Functional Foods—Opportunities, Perspectives, Applications, and Regulations<br><b>Jerzy Zawistowski</b> - University of British Columbia (Canada)  |
| <b>O2</b> | 1138 | Extraction and Application of Rosmarinic Acid and Carnosic Acid from <i>Melissa Officinalis</i> and <i>Rosmarinus Officinalis</i> : Natural Antioxidants for Sustainable Food Preservation and Antimicrobial Therapy<br><b>Olatunji Salako</b> - University of West Attica (Greece) |
| <b>O3</b> | 1105 | Phytochemicals for Functional Foods and Nutraceuticals: Prospects and Challenges<br><b>Petras Rimantas Venskutonis</b> - Kaunas University of Technology (Lithuania)  |
| <b>O4</b> | 1141 | Novel Postbiotic Metabolites Derived from Proanthocyanidins Demonstrate Potential to Mitigate Metabolic Dysregulation<br><b>H.P. Vasantha Rupasinghe</b> - Dalhousie University (Canada)  |
| <b>O5</b> | 1130 | Characterization of Phenolic Compounds in Purple Carrot-Enriched Wild Rice Noodles and Physical Assessment<br><b>Beverly Too</b> - University of Manitoba (Canada)  |
| <b>O6</b> | 1209 | Evaluation of the Anticancer Potential of Antioxidant-Rich Fractions in the Methanolic Leaf Extract of <i>Piper Betle</i> L. (Piperaceae)<br><b>Maude Angela Aujero</b> - University of the Philippines (Philippine)  |

#### Session 2: Proteins and Bioactive Peptides - 1

##### **Moderators:**

Rotimi Aluko (University of Manitoba, Canada)

Jianping Wu (University of Alberta, Canada)

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| <b>O7</b>  | 1066 | Structure and Function of Pea Protein-Derived Peptide Inhibitors of Butyrylcholinesterase<br><b>Rotimi Aluko</b> - University of Manitoba (Canada)   |
| <b>O8</b>  | 1075 | Canola Meal as a Source of Bioactive Peptides for the Prevention of Osteoporosis<br><b>Jianping Wu</b> - University of Alberta (Canada)  |
| <b>O9</b>  | 1067 | Novel Food Protein-Derived Bitter Taste Blockers and their Mechanisms of Action<br><b>Prashen Chelikani</b> - University of Manitoba (Canada)  |
| <b>O10</b> | 1073 | Protein Hydrolysates from Flixweed/Sophia ( <i>Descurainia Sophia</i> L.) Seed Meal Serve as a Source of Antioxidant and ACE Inhibitory Peptides<br><b>Chandrika Sewwandi Dissanayaka</b> - Memorial University of Newfoundland (Canada) |
| <b>O11</b> | 1149 | Flaxseed-Derived Trypsin Inhibitor: Physicochemical Characterization and Application in Fish Surimi Gel Production<br><b>Hitomi Kumagai</b> - Nihon University (Japan)   |

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| <b>O12</b> | 1080 | Functional Evaluation of Buckwheat Albumin-Polysaccharide Conjugates<br><b>Kazumi Ninomiya</b> - Gunma University (Japan) |
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### Session 3: Upcycling and Zero Waste Processing of Food - 1 IUFOST & ISNFF Session

#### **Moderators:**

Cesarettin Alasalvar (TÜBİTAK MAM, Türkiye)

Dejian Huang (National University of Singapore (Singapore))

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|------------|------|---|
| <b>O13</b> | 1191 | Upcycling of Several Food By-Products for Food and Feed Applications<br><b>Kazuo Miyashita</b> - Hokkaido Bunkyo University (Japan)   |
| <b>O14</b> | 1213 | Sustainable Agriceuticals: Reclaiming Food Bioactives from Coproducts of Agricultural and Food Industry<br><b>Dejian Huang</b> - National University of Singapore (Singapore)   |
| <b>O15</b> | 1079 | Upcycling Oilseed Processing Industry Co-Products for Functional Ingredients<br><b>Nandika Bandara</b> - University of Manitoba (Canada)  |
| <b>O16</b> | 1125 | Upcycling of Virgin Coconut Oil Processing By-Products into Coconut Protein-Based Ingredients: Characterization, <i>In Vitro</i> Digestion Behavior, and Effects on Immune Response Biomarkers<br><b>Restituto Tocmo</b> - University Of Reading (UK) |
| <b>O17</b> | 1184 | Closing the Loop: Transforming Seafood Co-Products into Sustainable Lobster Bait in the Blue Circular Economy<br><b>Zhuliang Tan</b> - Subait Inc, Nova Scotia, Canada; Zhejiang Xingye Group Co., Ltd., Zhoushan, Zhejiang (China)                   |
| <b>O18</b> | 1064 | Valorization of Nut Processing By-Products: Opportunities in Functional Food and Health Industries<br><b>Cesarettin Alasalvar</b> – TÜBİTAK MAM (Türkiye)   |

### Session 4: Proteins and Bioactive Peptides - 2

#### **Moderators:**

Richard FitzGerald (University of Limerick Ireland)

Lorenza d'Adduzio (University of Milan, Italy)

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| <b>O19</b> | 1167 | Limpet ( <i>Patella Vulgata</i> ) Protein Concentrate Hydrolysates: Preparation, Characterisation and <i>In Vitro</i> Bioactive Properties<br><b>Richard Fitzgerald</b> - University of Limerick (Ireland) |
| <b>O20</b> | 1207 | Development of Bioactive 3D-Printed Scaffolds Functionalized with Okara-Derived Peptides for Tissue Regeneration<br><b>Lorenza d'Adduzio</b> - University of Milan (Italy)                                 |
| <b>O21</b> | 1173 | Contribution of Genetic Background to Nutritional and Bioactive Properties of Canadian Peas ( <i>Pisum Sativum</i> )<br><b>Matthew Nosworthy</b> - Agriculture and Agri-Food Canada (Canada)               |
| <b>O22</b> | 1172 | Regulation of Ras P21-Ral Gtpase Pathway Through Bitter Receptor Agonist, Quinine<br><b>Raj Bhullar</b> - University of Manitoba (Canada)  |
| <b>O23</b> | 1190 | Antidiabetic Potential and Bioavailability Challenges of a Modified Yeast-Derived Peptide (VW9) and its Derivatives  |

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|  |  | <b>Mahta Mirzaei</b> - Ghent University Global Campus (Republic of Korea) |
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## Session 5: Fermented Food and Beverages, Food, and Health

### **Moderators:**

Christofora Hanny Wijaya (IPB University, Indonesia)

Min-Hsiung Pan (National Taiwan University, Taiwan)

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| <b>O24</b> | 1177 | Piceatannol Attenuates Benzo[A]Pyrene/DSS-Induced Colorectal Cancer in Mice<br><b>Min-Hsiung Pan</b> - National Taiwan University (Taiwan)  |
| <b>O25</b> | 1205 | Standardizing Traditional Fermented Dairy Product Production <i>Via</i> Starter Cultures Made with Lactic Acid Bacteria Blends: A Case Study on Nono Production<br><b>George Cavender</b> - Clemson University (USA)      |
| <b>O26</b> | 1144 | Improvement of High-Fat Diet-Induced Gut Dysbiosis in Mice by Fermented Botanical Product and its Peptides Produced by Digestion of Small Intestinal Mucosa Extract<br><b>Tomoko Asai Emel</b> - Kyoto University (Japan) |
| <b>O27</b> | 1092 | "Oncom", a Fermented Food Made from Agriculture Residue as a Promising Functional Food<br><b>Christofora Hanny Wijaya</b> - IPB University (Indonesia)  |
| <b>O28</b> | 1193 | Impact of Functional Foods on Antibiotic Resistome in Human Gut<br><b>Pangzhen Zhang</b> - The University of Melbourne (Australia)  |
| <b>O29</b> | 1043 | Potential of Oat Protein in Preventing Hypertension and its Cardiovascular Complications<br><b>Thomas Netticadan</b> - Agriculture & Agri-Food Canada (Canada)  |

## Session 6: Proteins and Bioactive Peptides - 3

### **Moderators:**

Kenji Sato (Kyoto University, Japan)

Nan Shang (China Agricultural University, China)

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| <b>O30</b> | 1165 | Oral Administration of Glutathione Improves Liver Function Via Enhancing Cysteine Transportation to Liver<br><b>Kenji Sato</b> - Kyoto University (Japan)  |
| <b>O31</b> | 1164 | Antioxidant Properties and Prediction of Bioactive Peptides Produced from Sophia Meal ( <i>Descurainis Sophia</i> L.)<br><b>Thi Ty Na Ngo</b> - Nong Lam University (Vietnam)  |
| <b>O32</b> | 1154 | Immunomodulatory Effects of Proline-Containing Diketopiperazines (Csp, Cap, And Clp) on J774A.1 Macrophage<br><b>Ann Elaine Wagan</b> - Kyoto University (Japan)   |
| <b>O33</b> | 1153 | Ultrasound-Assisted Enzymatic Hydrolysis Enhances Bioactive Peptide Yield and Bioactivity from Common Bean and Pumpkin Seed Proteins: Antioxidant, Anti-Inflammatory and Anti-Steatotic Effects<br><b>Erick Huerta-Rodriguez</b> - Tecnológico De Monterrey (Mexico) |
| <b>O34</b> | 1151 | Sturgeon Collagen Peptides as Potential Anti-Aging Agents: from Preparation to Molecular Mechanisms  |

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|  |  | <b>Nan Shang</b> - China Agricultural University (China) |
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## September 16, 2025 (Tuesday)

### Session 7: Polyphenols, their Metabolites, Antioxidant, and Health - 2

#### **Moderators:**

Rong Tsao (Agriculture & Agri-Food Canada, Canada)

Vasantha Rupasingh (Dalhousie University, Canada)

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| <b>O35</b> | 1161 | Anti-Obesity Effect of Adzuki Bean Saponin and its Related Molecular Mechanism<br><b>Baojun Xu</b> - Beijing Normal-Hong Kong Baptist University (China)                               |
| <b>O36</b> | 1086 | Dietary Polyphenols as Antioxidants, Anti-Inflammatory Agents, Prebiotics and Postbiotics<br><b>Rong Tsao</b> - Agriculture & Agri-Food Canada (Canada)                                |
| <b>O37</b> | 1088 | Gastrointestinal Fate of Acai Berry Polyphenols and Anthocyanins: Impact of Food Matrix<br><b>Kumkum Ravish</b> - Deakin University (Australia)  |
| <b>O38</b> | 1081 | Bioaccessibility Enhancement of Lentil Hulls Phenolics Using Steam Explosion and High-Pressure Processing<br><b>Sarusha Santhiravel</b> - Memorial University of Newfoundland (Canada) |
| <b>O39</b> | 1072 | Durian Fruit Rind: A Rich Source of Bioactive Compounds with Potential Biological Activities<br><b>Hoang Chinh Nguyen</b> - Deakin University (Australia)                              |
| <b>O40</b> | 1186 | Antioxidant Capacity, Antimicrobial Properties, and Glycemic Enzyme Inhibition of Caesalpinia Minax Hence Extract<br><b>Ngoc Thao Ngan Trinh</b> - Nong Lam University (Vietnam)       |

### Session 8: Proteins, Bioactive Peptides, Extraction, and Digestion

#### **Moderators:**

Wang Liao (Southeast University, China)

Megumi Hosokawa (Tokyo Kasei University, Japan)

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| <b>O41</b> | 1131 | Antioxidant and Anti-Inflammatory Activities of Pea Protein Hydrolysate in Lipopolysaccharide-Stimulated RAW 264.7 Macrophages<br><b>Deepak Kadam</b> - University of Manitoba (Canada)     |
| <b>O42</b> | 1108 | Anti-Hypertensive Effects of Egg White Hydrolysate: A Synergy Between Gut Microbiome-Dependent and Independent Mechanisms<br><b>Kaustav Majumder</b> - University of Nebraska-Lincoln (USA) |
| <b>O43</b> | 1093 | Thermal Structural Alterations of Carnosine by Heat Treatment in Chicken Breast<br><b>Megumi Hosokawa</b> - Tokyo Kasei University (Japan)  |



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| <b>O44</b> | 1101 | The Regulatory Effects of Food Protein-Derived Peptides on Glucose Metabolism: Evidence from New Perspectives<br><b>Wang Liao</b> - Southeast University (China)   |
| <b>O45</b> | 1206 | Hansen Solubility-Based Screening of Natural Deep Eutectic Solvents (NADES) for Selective Extraction of Methyl Gallate-Rich Fractions from Paeonia Spp.<br><b>Sana Abbas</b> - Kaunas University of Technology (Lithuania) |
| <b>O46</b> | 1134 | Comparison of Basic Chemical Composition and Antioxidant Activity of Whole Garlic Plants Harvested at Various Times<br><b>Jerzy Zawistowski</b> - University of British Columbia (Canada)                                  |

## Session 9: Upcycling and Zero Waste Processing of Food - 2 IUFOST & ISNFF Session

### Moderators:

Cesarettin Alasalvar (TÜBİTAK MAM, Türkiye)

Zhuliang Tan (Subait Inc, Nova Scotia, Canada; Zhejiang Xingye Group Co., Ltd., Zhoushan, Zhejiang, China)

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| <b>O47</b> | 1208 | Building a Regional Blue Bioeconomy: Upcycling of Seafood Organic Waste in Atlantic Canada<br><b>Heather Burke</b> - Memorial University of Newfoundland (Canada)  |
| <b>O48</b> | 1099 | Utilization of Innovatively Processed Food Waste Residues for Sustainable Aquafeed Formulation<br><b>Krishmali Ekanayake</b> - Deakin University (Australia)   |
| <b>O49</b> | 1104 | Enzymatic Hydrolysates from Lophiomus Setigerus Byproducts: A Sustainable Approach to Promote Muscle Growth<br><b>R.P.G.S.K. Amarasiri</b> - Jeju National University (Republic of Korea)  |
| <b>O50</b> | 1136 | Upcycling of Mustard Seed Processing By-Products: A Comprehensive Profiling of Mustard Bran Phenolics and Glucosinolates and their Antioxidant Potential after Solid-State Fermentation by Rhizopus Spp.<br><b>Joy Roasa</b> - Agriculture and Agri-Food Canada (Canada) |
| <b>O51</b> | 1157 | Hydrothermal-Assisted Co-Recovery of Pectin, Phenolics, and Sugars Coupled with Development of Highly Functional Insoluble Dietary Fibres from Apple Pomace<br><b>Sachin Talekar</b> - Deakin University (Australia)   |
| <b>O52</b> | 1115 | Antioxidant Potential of Lophiomus Setigerus-Bone Hydrolysate Against H2O2-Induced Oxidative Stress <i>In Vitro</i> and <i>In Vivo</i><br><b>Li Yiqiao</b> - Jeju National University (Republic of Korea)  |

## Session 10: Food Production, Processing (Including Ultra-Process), Nutrition, and Health

### Moderators:

Woo-Ju Kim (Seoul National University of Science and Technology, Republic of Korea)

Farnaz Maleky (The Ohio State University, USA)

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| <b>O53</b> | 1091 | Physical and Tribo-Rheological Properties of Agglomerated Guar Gum with Fucoidan Binder<br><b>Juneha Bak</b> - Dongguk University-Seoul (Republic of Korea)          |
| <b>O54</b> | 1058 | Novel Approach for Control of Food Safety: Potential of AI Technology<br><b>Woo-Ju Kim</b> - Seoul National University of Science and Technology (Republic of Korea) |

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| <b>055</b> | 1170 | Impact of Confinement-Based Sucrose Feeding on Honey Yield, Physicochemical Properties and Microbial Composition of <i>Heterotrigona Itama</i> Stingless Bee Species<br><b>Rabiatul Adawiah Mohd Noor</b> - Universiti Putra Malaysia (Malaysia) |
| <b>056</b> | 1146 | Protein–Lipid Colloidal Matrices for Enhanced Structural Fidelity in 3D Food Printing<br><b>Farnaz Maleky</b> - The Ohio State University (USA)  |
| <b>057</b> | 1078 | Quality Evaluation of Brown Rice-Based Flaked Breakfast Cereal Enriched with Defatted Soybean and Ginger Blends<br><b>Mojisola Oladapo</b> - Obafemi Awolowo University (Nigeria)  |
| <b>058</b> | 1211 | AI-Driven Enzyme Discovery and Evolution for Functional Food and Nutraceutical Innovation<br><b>Zilong Qiu</b> - Matwings Technology Co., Ltd. (China)   |

### Session 11: Functional Lipids, Omega-3, and Dietary Supplement

#### **Moderators:**

Chin-Kun Wang (Chung Shan Medical University, Taiwan)

Jaroslav Kralovec (Apollo Advanced Biosciences, Canada)

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| <b>059</b> | 1204 | Long-Chain Fatty Acid-Derived Therapeutics: Emerging Frontiers in Lipid-Based Medicines<br><b>Jaroslav Kralovec</b> - Apollo Advanced Biosciences (Canada)   |
| <b>060</b> | 1076 | Improvement of Gac Fruit Aril Oil on Eyes and Skin<br><b>Chin-Kun Wang</b> - Chung Shan Medical University (Taiwan)  |
| <b>061</b> | 1110 | Bioprocessing of Squid Viscera for Production of Omega-3 Rich Oil<br><b>Asavari Achyut Joshi</b> - Deakin University (Australia)   |
| <b>062</b> | 1065 | Correlating Surface Activity with the Foaming Properties of Milk Upon Limited Lipolysis<br><b>Nguyen Nam Dung Phan</b> - University of Guelph (Canada)   |
| <b>063</b> | 1049 | Development and Evaluation of Vitamin D Fortified Cream Sandwich Biscuits for Addressing Micronutrient Deficiency in School-Age Children<br><b>Sana Sadaat</b> - Government College University Faisalabad (Pakistan) |
| <b>064</b> | 1045 | Structured Lipids Containing DHA and EPA: Potential Nutritional and Health Benefits<br><b>Lanh Van Nguyen</b> - Memorial University of Newfoundland (Canada)   |

### Session 12: Traditional and Novel Approaches for Bioavailability Improvement

#### **Moderators:**

Nandika Bandara (University of Manitoba, Canada)

Kaustav Majumder (University of Nebraska-Lincoln, USA)

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| <b>065</b> | 1102 | Traditional and Novel Approaches to Evaluate the Digestion and Absorption of Carbohydrates<br><b>Tong Wang</b> – Southeast University (China)  |
| <b>066</b> | 1148 | Relationship between Hydroxyproline Peptides Concentration in Human Blood and Condition of Osteoarthritis after 12 Weeks of Collagen Peptide Ingestion<br><b>Yasutaka Shigemura</b> - Tokyo Kasei University (Japan) |
| <b>067</b> | 1132 | Taste Engineering: Next-Gen Savory Peptides <i>Via</i> Peptidomics and Computational Chemistry<br><b>Kaustav Majumder</b> - University of Nebraska-Lincoln (USA)   |

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| <b>O68</b> | 1180 | Natto-Derived Dipeptide Gln-Gln Improves Cognitive Function through BBB Penetration and Hippocampal Modulation<br><b>Shigeru Katayama</b> - Shinshu University (Japan)  |
| <b>O69</b> | 1155 | <i>In Vitro</i> Digestive Stability of Extracellular Polysaccharides from <i>Bifidobacterium Animalis</i> RH and Analysis of Prebiotic Effects<br><b>Shuyuan Shi And Nan Shang</b> - China Agricultural University (China)                      |
| <b>O70</b> | 1210 | Unlocking the Gut Health Benefits of Indigenous Fermented Foods and Underutilised Crops in Borneo and Malaysia: Bridging Traditional Practices with Functional Nutrition<br><b>Shahrul Razid Sarbini</b> - Universiti Putra Malaysia (Malaysia) |

## September 17, 2025 (Wednesday)

### Session 13: Flash Talk Session

#### **Moderators:**

Fereidoon Shahidi (Memorial University of Newfoundland, Canada)

Ronald B. Pegg (University of Georgia, USA)

**Notes:** Awards consist of a certificate and cash. All invited finalists must be a member of ISNFF, so applications fees for 2025 will be deducted from the cash payment to ensure membership compliance (please have your membership application completed if you are invited and are not an ISNFF member already). Selected students (up to 15) from oral and poster sessions will advance to the flash talk session upon invitation. Therefore, all student presenters are expected to be prepared for giving a 5 min (3 min talk with 3 slides + 2 min questions) talk. There will be a maximum of 15 awards to be presented for the first (one awardee), second (two awardees), third place (three awardees) and the rest as honorable mention. Awards (1st-3rd) consist of a certificate and cash.

### Session 14: R&D of Functional Foods, Nutraceuticals, and Dietary Supplements

#### **Moderators:**

Shiming Li (Huanggang Normal University, China)

Nae-Cherng Yang (Chung Shan Medical University, Taiwan)

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| <b>071</b> | 1176 | The Protective Effects of <i>Gastrodia Elata</i> Biophytochemicals on Brain Diseases<br><b>Shiming Li</b> - Huanggang Normal University (China)   |
| <b>072</b> | 1135 | The Synthesis, Toxicity, and Safety Profile of Parapyruvate<br><b>Nae-Cherng Yang</b> - Chung Shan Medical University (Taiwan)  |
| <b>073</b> | 1048 | Oral Administration of Cysteine Peptides Attenuates UV-B-Induced Skin Erythema and Pigmentation and Increases Skin Brightness in Humans<br><b>Ayako Sakuma</b> - Mitsubishi Corporation Life Sciences Limited (Japan)                     |
| <b>074</b> | 1107 | Synergistic Antimicrobial Potential of Herbal Extract-Based Nanoparticles from <i>Azadirachta Indica</i> , <i>Aloe Vera Barbadosensis</i> , and <i>Curcuma Longa</i><br><b>Ghulam Mustafa Kamal</b> - Khwaja Fareed University (Pakistan) |
| <b>075</b> | 1082 | Valorization of Agricultural By-Products Using Electrolysis Technology for Development of Functional Food<br><b>Parkash Meghwar</b> - University of Karachi (Pakistan)  |
| <b>076</b> | 1179 | Effect of Curcumin on STX-Induced Brain Glucose Metabolic Dysregulation and Neurotoxicity in Lobster Cockroach Modell<br><b>Kehinde Aluko</b> - Federal University of Technology (Nigeria)  |

## Session 15: Functional Carbohydrate, Controlled-Release, and Bioactive Valorization

### Moderators:

Amin Bin Ismail (Universiti Putra Malaysia, Malaysia)

Gow-Chin Yen (National Chung Hsing University, Taiwan)

|            |      |  |
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| <b>O77</b> | 1111 | Health-Promoting Properties and Components of Wheat Fermented by <i>Schizophyllum Commune</i> Mushroom<br><b>Amin Bin Ismail</b> - Universiti Putra Malaysia (Malaysia)                            |
| <b>O78</b> | 1062 | RS4 Tapioca Resistant Starch Ameliorates High-Fat Diet-Induced Obesity in Mice by Modulating Lipid Metabolism and Gut Microbiota<br><b>Gow-Chin Yen</b> - National Chung Hsing University (Taiwan) |
| <b>O79</b> | 1050 | Nanoemulsion-Based Delivery of Chrysin for Enhanced Functional Efficacy in Food Applications<br><b>Yuna Lee</b> - Korea Atomic Energy Research Institute (Republic of Korea)                       |
| <b>O80</b> | 1201 | Exploring Fruit Biowaste Bioactive Compounds for Development of Functional Food and Drug Therapies<br><b>Shivraj Nile</b> - National Agri-Food Biotechnology Institute – NABI (India)              |

## Session 16: Spices, Fruits/Vegetables, Nuts, Microbiome

### Moderators:

Yuan Soon Ho (China Medical University, Taiwan)

Yao Tang - Tianjin University of Science and Technology (China)

|            |      |  |
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| <b>O81</b> | 1185 | Assessment of Anti-Inflammatory Potential of Georgia Pecan Phenolics Using Murine and Human Macrophages<br><b>Ronald B. Pegg</b> - University of Georgia (USA)   |
| <b>O82</b> | 1126 | Total Saponin, Polysaccharide, Tannin, and Flavonoid Contents, and DPPH Inhibitory Activity of <i>Ilex Annamensis</i> , <i>Ilex Cochinchinensis</i> , <i>Ilex Rotunda</i> , and <i>Ilex Triflora</i> Crude Methanol Extracts<br><b>An Chieu Tran</b> - Vietnam Academy of Science and Technology (Vietnam) |
| <b>O83</b> | 1133 | Dietary $\Gamma$ -Glutamyl Valine: A Novel Modulator of Gut Microbiota for Atherosclerosis Alleviation<br><b>Kaustav Majumder</b> - University of Nebraska (USA)   |
| <b>O84</b> | 1178 | Phloretin Increases Anti-HER2 Antibody Drug Affinity for Cancer Cells as an Adjunct Therapy for Drug-Resistant Tumors in HER2-Positive Breast Cancer<br><b>Yuan Soon Ho</b> - China Medical University (Taiwan)  |
| <b>O85</b> | 1137 | A Novel Thermal Processing Approach to Enhance Target Phytochemicals in Medicinal-Edible Plants for High-Value Nutraceuticals<br><b>Yao Tang</b> - Tianjin University of Science and Technology (China)  |

## Session 17: Analytical Methods, Molecular Docking Combined with Cereals and Legumes

### Moderators:

Banu Sezer (Anton Paar GmbH, Austria)

Heather Burke (Marine Institute, Memorial University, Canada)

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|------------|------|---|
| <b>O86</b> | 1183 | Multimodal Analytical Approaches for Enhancing Quality in Functional Food Systems<br><b>Banu Sezer</b> - Anton Paar GmbH (Austria)  |
| <b>O87</b> | 1196 | Combined Nitrogen and Sulfur Fertilization on the Structural and Physicochemical Properties of Buckwheat Starch<br><b>Licheng Gao</b> - Ghent University (Belgium)                              |
| <b>O88</b> | 1166 | Investigating Protein Hydrolysates as Dual DPP-IV and ACE Inhibitors through Integrated <i>In Silico</i> And <i>In Vitro</i> Approaches<br><b>Ali Iqbal</b> - China Medical University (Taiwan) |
| <b>O89</b> | 1055 | Metabolomics-Driven Discovery of Bioactive Compounds in Functional Foods for Health and Therapeutic Applications<br><b>Doralyn Dalisay</b> - University of San Agustin (Philippines)            |

## Session 18: Marine and Aquaculture Products, Carotenoids, Regulation and Others

### Moderators:

Deepika Dave (Marine Institute of Memorial University of Newfoundland, Canada)

Ye Hui (Nanyang Technological University, Singapore)

|            |      |   |
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| <b>O90</b> | 1129 | Assessment of Bioaccessibility of Dietary Carotenoid Compounds from Durum Wheat<br><b>Trust Beta</b> - University of Manitoba (Canada)  |
| <b>O91</b> | 1195 | Exploring High-Value Applications of Atlantic Seaweeds: A Multi-Sectoral Perspective<br><b>Deepika Dave</b> - Memorial University of Newfoundland (Canada)  |
| <b>O92</b> | 1113 | <i>Sargassum Swartzii</i> -Derived Sulfated Polysaccharides Attenuate Urban Particulate Matter-Induced Lung Inflammation <i>Via</i> Inhibition of TLR-Mediated NF- $\kappa$ B Signalling<br><b>Dinusha Shiromala Dissanayake</b> - Jeju National University (Republic of Korea) |
| <b>O93</b> | 1212 | Naringin Ameliorates Obesity <i>Via</i> Stimulating Adipose Thermogenesis, Promoting Browning, and Modulating Gut Microbiota in Diet-Induced Obese Mice<br><b>Ye Hui</b> - Nanyang Technological University (Singapore)   |