

**NARO 3rd International Symposium on Food and Health
"FERMENTATION -Technology and Health-**

16 April 2024 13:00-17:30 (JST)

Program

The following contents are subject to change.

13:00-13:15	Opening Ceremony
13:15-13:55	Keynote Lecture
1. Sustainable futuristic healthy society realized through AI-assisted nutritional habits AI と相談する食生活で実現する持続可能な未来型健康社会 Dr. HAYASHI Nobuhiro, Vice president for international affairs Professor, School of Life Science and Technology, Tokyo Institute of Technology, Japan	
2. Ferments du Futur: a public-private partnership to accelerate research and innovation on ferments, fermented foods and biopreservation 発酵で未来を創造：発酵、発酵食品、食資源の保存に関する研究とイノベーションを加速する官民パートナーシップ Dr. Damien Paineau, Chief Executive Officer, Ferments du Futur Service Unit, INRAE, France	
	10 min. break
14:05-15:30	Lecture Session I
	Fermentation and Health Functions/発酵と健康
	Session Leader: Dr. KOBORI Masuko, Chief, Department of Food Function and Labeling, National Institute of Health and Nutrition, National Institutes of Biomedical Innovation, Health and Nutrition, Japan/ex Institute of Food Research, NARO (NFRI)
	【Lecture】 Health Regulatory Function of Ferments / 発酵食品の健康調節機能
1. Metabolites and its functions of fermenting microorganisms 発酵微生物の代謝産物とその機能 Dr. HAGI Tatsuro, Principal Scientist, NFRI, Japan	
2. Exploring Traditional Fermented Foods in Thailand and Their Health Benefits タイの伝統的な発酵食品とその健康機能の探索 Dr. Massalin Nakphaichit, Associate Professor, Specialized Research Unit: Probiotics and Prebiotics for Health, Faculty of Agro-Industry, Kasetsart University, Bangkok, Thailand	
	【Lecture】 Value of Food Created by Fermentation / 発酵が生み出す食品の付加価値
3. Structural variation of starch affecting the physical properties and digestibility of starch-based food ingredients 澱粉系素材の物性および消化性に影響を及ぼす澱粉構造の多様性 Dr. MATSUKI Junko, Principal Scientist, NFRI, Japan	

4. High amylose wheat foods: effects on *in vitro* starch digestion and gut fermentation

高アミロースコムギ食品：*in vitro* 濃粉消化と腸内発酵へ与える効果

Prof. Mike Gidley, Centre for Nutrition and Food Sciences, The University of Queensland, Brisbane, Australia

【Discussion】

15 min. break

15:45-17:25

Lecture Session II

Fermentation Technologies/発酵テクノロジー

Session Leader: Dr. KIMURA Keitarou, Manager, Division of Food Processing and Biomaterials Research, NFRI, Japan

【Lecture】 Diversity and Usage of Lactic Acid Bacteria / 乳酸菌—その多様性と豆乳発酵—

1. Diversity of NARO-Lactic Acid Bacteria Collection

NARO-乳酸菌コレクションの多様性

Dr. TOMITA Satoru, Senior Scientist, NFRI, Japan

2. The stressing life of *Lactobacillus delbrueckii* subsp. *bulgaricus* in soy milk: other starters may help

乳発酵細菌 (*Lactobacillus delbrueckii* subsp. *bulgaricus*) が豆乳中で受けるストレスと他のスター ターによる緩和

Dr. Gwénaël Jan, Directeur de Recherche/Senior Scientist, STLO, INRAE, Institut Agro, France

【Lecture】 Upcycling Resources via Fermentation / 発酵による未利用資源のアップサイクル

3. Precise control of bioconversion process for upcycling of agricultural and food byproducts

農業・食品副産物のアップサイクルに向けた生物変換プロセスの精密制御

Dr. IKE Masakazu, Principal Scientist, Research Center for Agricultural Robotics, Core Technology Research Headquarters, NARO, and NFRI, Japan

4. Upgrading residual biomasses by fermentation: possibilities and priorities

発酵による食品副産物・農産物残渣のアップグレード：可能性と優先事項

Dr. Ugo Javourez, Scientist at the Toulouse Biotechnology Institute, INSA Toulouse, France

5. New aspects of fermentation by KOJI, *Aspergillus oryzae*

麹菌発酵の新たな展開

Dr. MANO Junichi, Principal Scientist, NFRI, Japan

【Discussion】

17:25-17:30

Closing