NARO 1st International Symposium on Food and Health "Food Science to Market, from Local to Global"

Purpose

The situation surrounding the agriculture and food industry is changing drastically. The COVID-19 pandemic exposed the vulnerability of the food supply chain and reaffirmed the importance of food security. Achieving sustainable food production and supply is a global challenge, as we are facing the destabilization of agricultural and livestock production due to climate change, and the global food market is expected to grow along with the huge increase in human population.

The UN Food Systems Summit held in September 2021, set the stage for global food systems transformation to achieve the Sustainable Development Goals (SDGs) by 2030. The five Action Tracks, *e.g.* "Access to safe and nutritious food for all" and athere are aligned with the Summit's five shiretimes.

all" and others are aligned with the Summit's five objectives.

Japan hosted the Tokyo Nutrition for Growth Summit in December 2021, building on the outcomes of the UN Food Systems Summit, to lead international efforts to eradicate poverty and hunger, and to improve nutrition for people around the world.

Global food value enhancement and market expansion focusing on nutrition and health is an initiative that contributes to the achievement of the SDGs by improving nutrition and achieving healthy longevity for people around the world, and is also a business opportunity in the food-related industries.

NARO is holding an international symposium on the theme of "Food and Health" in March 2022, by inviting speakers from the food-related private sector and academic research institutes that are conducting research from a global perspective. Based on scientific evidence on food and health rooted in regions such as Asia, America, and Europe, we will discuss how to create a food industry and contribute internationally by increasing the value of food and expanding it to the global market.

The symposium will consist of a keynote session and three discipline-specific sessions. In each session, with the cooperation of participating companies, we will also plan a "pitch" to introduce unique initiatives and match research and market needs. The aims of each session are as follows:

Keynote speech session: We will share case studies and international trends regarding the concept of "Food Science to Market" by providing topics, "Global trends and international initiatives on food and health", "A group company's challenges to resolve food and health issues", "Development of functional foods through seamless research from basic to application, and future research on healthy foods ", and "Food and Health: science alone is not enough!".

Session I "Nutrition for Health": In the international trend of food and health focusing on health promotion, we will introduce cutting-edge research aiming for "healthy longevity by diet" through innovation of nutrition management technologies such as research on food with functional claims and nutrition mechanisms.

Session II "Crop Development for Abundance & Healthy Diet": What kind of optimal solution can be derived by crop development using genome information, sensing and ICT for agricultural production in the 21st century, where uncertainty increases due to population growth and climate change? We will introduce the latest technologies and discuss what we can do now.

Session III "Food Science to Global Business": From the perspective of open innovation, we will share case studies and discuss global branding strategies on "Agri Food Tech" R&D such as international standardization and pursuit of deliciousness.

Supported by : (MAFF), Wageningen University & Research (WUR), National Research Institute for Agriculture, Food and Environment, France (INRAE), Embassy of the Kingdom of the Netherlands, Science and Technology Department, Embassy of France in Japan, Foodvalley NL, Vitagora

We look forward to your participation. Participation fee: Free. Capacity: 1000 people. Application deadline: February 22, 2022

Program

The following contents are subject to change.

| 1st Day Opening | | | | | | | |
|--------------------|----------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| | | | | | | | |
| 6:00- | 23:00- | 14:00- | Opening Remark | | | | |
| 6:20 | 23:20 | 14:20 | Dr. KYUMA Kazuo, President, NARO | | | | |
| | | | Greetings | | | | |
| | | 5min | • Prof. Louise O. Fresco, President, Wageningen University & Research (WUR) | | | | |
| | | each | • President, National Research Institute for Agriculture, Food and Environment | | | | |
| | | | (INRAE) | | | | |
| | | | AOYAMA Toyohisa, Director-General, Agriculture, Forestry and Fisheries Research Council's Secretariat, MAFF | | | | |
| | | | Keynote Lecture | | | | |
| 6:20- | 23:20- | 14:20- | 1. FAO Headquarters Dr. Ismahane Elouafi, Chief Scientist | | | | |
| 6:40 | 23:40 | 14:40 | Global trends and international initiatives on food and health | | | | |
| | | | | | | | |
| 6:40- | 23:40- | 14:40- | 2. <u>Ajinomoto (Japan)</u> Dr. SHIRAGAMI Hiroshi, Executive Officer & | | | | |
| 7:00 | 0:00 | 15:00 | Senior Vice President/ Chief Innovation Officer (CIO) & Management | | | | |
| | | | of R&D | | | | |
| <u> </u> | 00.00 | 15.00 | Ajinomoto Group's challenges to "Resolve Food and Health Issues" | | | | |
| 6:00- 7:20 | 23:00- 0:20 | 15:00- 15:20 | 3. <u>NARO (Japan)</u> Dr. MAEDA-YAMAMOTO Mari, Executive Scientist, | | | | |
| 1.20 | 0:20 | 15:20 | Food Research Institute (NFRI), NARO Development of functional foods through seamless research from basic | | | | |
| | | | to application, and the future research on healthy foods | | | | |
| 7:20- | 0:20- | 15:20- | 4. Foundation for Food Agriculture Research (USA) Dr. Chris Mallett, | | | | |
| 7:40 | 0:40 | 15:40 | Director /formerly Corporate Vice President for Innovation, Research | | | | |
| | | | and Development at Cargil Incorporated | | | | |
| | | | Food and Health: science alone is not enough! | | | | |
| | | | 10min break | | | | |
| | | | Lecture | | | | |
| Sessio | n I: Nutr | rition for H | Health | | | | |
| Ses | sion Lead | der: Dr. K | AMEYAMA Mayumi, Director, NFRI, NARO | | | | |
| | | | [Lecture] | | | | |
| 7:50- | 0:50- | 15:50- | 1. NARO (Japan) Dr. KOBORI Masuko, Manager, Division of Food | | | | |
| 8:05 | 1:05 | 16:05 | Function Research, NFRI, NARO | | | | |
| | | | Health Promotion and R&D in Japan for Healthy Longevity -Research toward developing and proposing healthy functional, | | | | |
| | | | palatable and healthy foods for Japanese foods and constituent foods | | | | |
| | | | (agricultural products) - | | | | |
| 8:05- | 1:05- | 16:05- | 2. WUR (the Netherlands) ir. MJ (Martine) van der Mast & dr. NJW | | | | |
| 8:20 | 1:20 | 16:20 | (Nicole) de Wit | | | | |
| | | | Personalized Nutrition and behavioral impact | | | | |
| 8:20- | 1:20- | 16:20- | 3. Kao Corporation (Japan) Dr. TAKASE Hideto, Biological Science | | | | |
| 8:35 | 1:35 | 16:35 | Research | | | | |
| | | | Development and implementation of "Smart Washoku" concept for the | | | | |

| | | | prevention of visceral fat accumulation leveraging healthy Japanese |
|--------------------|-----------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | dietary habits |
| 8:35- | 1:35- | 16:35- | [Discussion] |
| 8:50 | 1:50 | 16:50 | What is necessary for consumers to manage nutrition and promote wellness? |
| 8:50- | 1:50- | 16:50- | (Pitch) |
| 9:10 | 2:10 | 17:10 | 1. <u>Dole Asia Holdings (Singapore)</u> : <i>Global development of fruits as</i> <i>functional food.</i> |
| | | 5min each | 2. <u>Yakult Honsha (Japan)</u> : International Development of Healthy Habits with Lactic Acid Bacteria Drinks-Health and Happiness for People around the World - |
| | | | 3. Nestlé Japan (Japan): Fight against malnutrition |
| | | | 4. Kewpie (Japan): Studies on eggs and brain function for realization of |
| | | | healthy longevity through food |
| 2 nd Da | ay | | |
| Sess Veg | sion Lea | der: Dr. Research, | opment for abundance & healthy diet TAGUCHI Kazunori, Principal Research Scientist, Division of Warm Region Cultivation Management Team, Central Region Agricultural Research Center |
| | | | [Lecture] |
| 6:00- | 23:00- | 14:00- | 1. NARO (Japan) Dr. IMAI Ryozo, Leader, Genome Editing Crop |
| 6:10 | 23:10 | 14:10 | Development Group, Division of Crop Genomes Editing Research, NIAS, NARO In planta Particle bombardment (iPB) revolutionizes crop genome |
| | | | editing |
| 6:10- 6:25 | 23:10- 23:25 | 14:10- 14:25 | 2. <u>INRAE (France)</u> Dr. Christophe Salon, Directeur de Recherches <i>High throughput phenotyping and associated tools and methods to</i> <i>assess determinisms of plant and microbiome interactions</i> |
| 6:25- | 23:25- | 14:25- | 3. University of Wisconsin–Madison (USA) Prof. Dr. Shawn Kaeppler, |
| 6:40 | 23:40 | 14:40 | Director Wisconsin Crop Innovation Center, Maize cultivar development for variable environments and future uses |
| 6:40- | 23:40- | 14:00- | [Discussion] |
| 6:55 | 23:55 | 14:55 | What are innovative breeding technologies and strategies for resolving food problems? |
| 6:55- | 23:55- | 14:55- | [Pitch] |
| 7:10 | 0:10 | 15:10 | 1. <u>Bayer Crop Science (Germany):</u> <i>Mission: Sustainable Health and</i> Nutrition Solutions through Science and Partnerships |
| | | 5min each | 2. <u>DAIZ (Japan):</u> <i>Plant meat with high oleic acid soybean</i> |
| | | | 10min break |
| Ses | sion Lead | der: Dr. G | e to Global Business OTO Kazuhisa, the Liaison Scientist in the Netherlands/Development Strategy |
| Cer | iter (ND | SC), NAF | |
| 7:20- 7:35 | 0:20- | 15:20- | [Lecture] 1. <u>FUJI EUROPE AFRICA B.V. (the Netherlands)</u> Dr. Liz Kamei, Head of Global Innovation Center Europe |
| | 0:35 | 15:35 | |

| | | | Creating market opportunities through our European plant-based | |
|---------|-------|--------|-----------------------------------------------------------------------------------|--|
| | | | food ecosystem | |
| 7:35- | 0:35- | 15:35- | 2. NARO (Japan) Mr. NESUMI Atsushi, Coordinator, Makurazaki Research | |
| 7:50 | 0:50 | 15:50 | Station | |
| | | | A new cultivar of Japanese tea delivering the "high-quality" to the Global market | |
| 7:50- | 0:50- | 15:50- | 3. European food industry cluster | |
| 8:20 | 1:20 | 16:20 | | |
| | | | • <u>Vitagora (France)</u> Ms. Bérengère Moindrot (International Development | |
| | | | Manager) | |
| | | | A results-driven strategy for supporting agri-food innovation | |
| | | | · FoodvalleyNL (the Netherlands) Dr. Jeroen Wouters, Lead Global | |
| | | | Connections. | |
| | | | Shaping the future of food together | |
| 8:20- | 1:20- | 16:20 | 4. <u>GreatPoint Ventures (USA)</u> Mr. Ray Lane, Managing Partner | |
| 8:35 | 1:35 | -16:35 | Venture capital investment in the food and agriculture sector | |
| 8:35- | 1:35- | 16:35- | [Discussion] | |
| 8:50 | 1:50 | 16:50 | How can we accelerate the open innovation in Food-Tech? | |
| 8:50- | 1:50- | 16:50- | [Pitch] | |
| 9:05 | 2:05 | 17:05 | 1. HighQuest Partners (USA): Trends in Agri-Tech investing | |
| Closing | | | | |
| 9:10- | 2:10- | 17:10- | Closing Address | |
| 9:15 | 2:15 | 17:15 | Dr. KATSUTA Masumi, Vice President, NARO | |