



HOKKAIDO
UNIVERSITY

- International Forum aiming at Foundation of
- A New Graduate School of Global Food Resources

Perspectives of Contribution to Facing Crisis on Food, Water and Land Resources via Transdisciplinary Human Resources

13:30 – 17:15 December 9th, 2014
Grand Lecture Hall, Faculty of Agriculture

**Admission Free,
No Registration Required
(Except for Reception)**

- 13:30 – 13:45 Opening Remarks
Dr. Keizo Yamaguchi, President, Hokkaido University
- 13:45 – 13:55 Special Guest Remarks I
Delegate from MEXT (TBA)
- 13:55 – 14:15 Special Guest Remarks II
Leading French Scientist of Agriculture selected by Embassy of France in Japan (TBA)
- 14:15 – 14:45 Introduction of a New Graduate School of Global Food Resources
Dr. Tomomi Marutani, Dean, Research Faculty of Agriculture, Hokkaido University
- 14:45 – 15:15 Expectation for the New Graduate School I
Agricultural Research Challenges towards Feeding 9 Billion People in 2050
Dr. Masa Iwanaga, President, JIRCAS
- 15:15 – 15:30 Coffee Break
- 15:30 – 16:00 Expectation for the New Graduate School II
My Hope to the New Graduate School to Function as an Integral Part of the Global Network of the Food Resources
Mr. Hiroshi Nagano, Chair, Global Science Forum, OECD
- 16:00 – 16:30 Expectation for the New Graduate School III
Collaborating Globally to Enhance the Educational Experience, Stay Relevant and Help to Ensure an Abundant,
Safe and Nutritious Global Food System
Dr. Sharon P. Shoemaker, Executive Director, CIFAR, UC Davis
- 16:30 – 17:00 Expectation for the New Graduate School IV
New Multinational Approaches to Interdisciplinary Doctoral Education: Challenges and Opportunities
Dr. Gretchen Kalonji, Former Assistant Director General for Natural Sciences, UNESCO
- 17:00 – 17:15 Closing Remarks
Dr. Kazunori Yasuda, Executive and Vice President, Hokkaido University
- 18:00 – 20:00 Reception
Restaurant ELM at Faculty House ENREISOU

The Organizing Committee of the International Forum,
Hokkaido University
060-8589, Kita-9 Nishi-9, Sapporo, Japan
Tel/Fax: +81-11-706-3341
Email: gfr-forum@agr.hokudai.ac.jp

国際食資源学院 国際フォーラム事務局
北海道大学
060-8589 札幌市北区北9条西9丁目
Tel/Fax: 011-706-3341
Email: gfr-forum@agr.hokudai.ac.jp

Perspectives of Contribution to Facing Crisis on Food, Water and Land Resources via Transdisciplinary Human Resources

December 9th, 2014

Invited Speakers



Dr. Masa Iwanaga
President

Japan International Research Center for Agricultural Sciences (JIRCAS)

1980 : Cytogeneticist, International Potato Center (CIP), Lima, Peru
1989 : Head, Genetics Resources Unit, International Center for Tropical Agriculture (CIAT), Cali, Colombia
1992 : Deputy Director General, International Plant Genetic Resources (IPGRI), Rome, Italy
2000 : Director, Japan International Research Center for Agricultural Sciences (JIRCAS), Tsukuba, Japan
2002 : Director General, International Maize and Wheat Improvement Center (CIMMYT), Mexico
2008 : Director General, National Institute of Crop Sciences, NARO, Tsukuba, Japan
2011 – present : President, Japan International Research Center for Agricultural Sciences (JIRCAS), Japan

I



Mr. Hiroshi Nagano
Chair

Global Science Forum, Organization for Economic Co-operation and Development (OECD)

2002 – 2004 : Director-General for International Affairs,
Ministry of Education, Culture, Sports, Science and Technology (MEXT)
2005 – 2007 : Executive Director, Japan Science and Technology Agency (JST)
2007 – 2013 : Professor, National Graduate Institute for Policy Studies (GRIPS)
2008 – 2009 : Chair, Financial Audit Board, the ITER International Fusion Energy Organization
2011 – present : Chair, Global Science Forum, Organization for Economic Co-operation and Development (OECD)

II



Dr. Sharon P. Shoemaker
Executive Director

California Institute of Food and Agricultural Research (CIFAR), University of California, Davis

1978 – 1985 : Scientist and Director, Fermentation R&D, Cetus Corporation, Berkeley, CA
1992 – present : Research Administrator, Food Science and Technology Department,
University of California, Davis
1991 – present : Founding Executive Director, California Institute of Food and Agricultural Research (CIFAR),
University of California, Davis
1994 – 2004 : UC Davis Site Director, NSF Center for Advanced Processing and Packaging Studies (CAPPS)
2000 – present : Advisor, Chinese Institute of Food Science and Technology
2007 – present : Member, Advisory Committee, DOE Bioenergy Science Center, Oak Ridge, TN (Chair, 2007 – 2012)
2014 : Member, Steering Committee, Global Action Platform, Nashville, TN

III



Dr. Gretchen Kalonji
Former Assistant Director General for Natural Sciences

United Nations Educational, Scientific and Cultural Organization (UNESCO)

1982 – 1990 : Assistant and Associate Professor of Materials Science and Engineering, MIT
1990 – 2005 : Kyocera Professor of Materials Science, University of Washington
2005 – 2009 : Director of International Strategy Development, University of California Office of the President
2009 – 2010 : Director of Systemwide Research Development, University of California Office of the President
2010 – 2014 : Assistant Director General for Natural Sciences, United Nations Educational,
Scientific and Cultural Organization (UNESCO), Paris

IV

Special Guests
(TBA)

Delegate from Ministry of Education, Culture, Sports, Science and Technology (MEXT)
Leading French Scientist of Agriculture selected by Embassy of France in Japan

Major Participants from Hokkaido University

Dr. Keizo Yamaguchi, President
Dr. Takashi Mikami, Executive and Vice President
Dr. Ichiro Uyeda, Executive and Vice President
Dr. Takahiko Nitta, Executive and Vice President
Dr. Kazunori Yasuda, Executive and Vice President

Dr. Kazushige Kawabata, Executive and Vice President
Mr. Kenichi Iyama, Executive
Mr. Naoki Murata, Executive and Director General
Dr. Tomomi Marutani, Dean, Research Faculty of Agriculture

The Organizing Committee of the International Forum,
Hokkaido University
060-8589, Kita-9 Nishi-9, Sapporo, Japan
Tel/Fax: +81-11-706-3341
Email: gfr-forum@agr.hokudai.ac.jp



HOKKAIDO UNIVERSITY

**International Forum aiming at Foundation of
A New Graduate School of Global Food Resources**

**PERSPECTIVES OF CONTRIBUTION TO FACING CRISIS ON
FOOD, WATER AND LAND RESOURCES
VIA TRANSDISCIPLINARY HUMAN RESOURCES**

ABSTRACTS

**Agricultural Research Challenges towards Feeding 9 Billion People
in 2050**

Dr. Masa Iwanaga

President, Japan International Research Center
for Agricultural Sciences

Currently, there are more than 800 million people who are not getting enough food. World population is likely to surpass 9 billion by 2050, and it will require more than 60 % of food production increase to meet at least the food demand of the population growth. Considering the global tendency toward increased animal-based food consumption, sustainable management of natural resources base, including water and soil fertility, and the adverse effects of climate change, agricultural research has to confront major challenges. The complexity and inter-related nature of global issues surrounding food and nutrition would require comprehensive understanding and integrated approaches to address these challenges.

**My Hope to the New Graduate School to Function as an Integral
Part of the Global Network of the Food Resources**

Mr. Hiroshi Nagano

Chair, OECD Global Science Forum

During my university time, I took one year off and spent time in Europe. As this undertaking brought me a lot in my life afterward, I would like to express the importance of the concept of the new Graduate School based on my experience. On top of that, I would introduce the good model in terms of educating PhD students in Germany and the activity I am dealing with at OECD. It is most critical to the new Graduate School to be well networked worldwide with high-level students, researchers and institutions.

Collaborating Globally to Enhance the Educational Experience, Stay Relevant and Help to Ensure an Abundant, Safe and Nutritious Global Food System

Dr. Sharon P. Shoemaker

Founding Executive Director, CIFAR,
College of Agricultural and Environmental
Sciences, University of California, Davis

The increasing scarcity of natural resources (food, water, land, energy) requires that we, as global citizens, rethink all aspects of our agricultural and food chain in order to achieve efficiencies and sustainability. Global trends show many commonalities, yet local and regional considerations will differ and prevail. The adaptation of technologies and practices that will be appropriate to any particular situation requires broad, multidisciplinary education that includes practical training and exposure to all approaches (conventional, organic, biotechnology). The CIFAR collaborative model will be examined to illustrate its impact on the entire cycle of the agri-food value chain, from farm to table and back to farm, demonstrating the vital issues of accessibility, safety, and quality that are key to achieving an abundant, nutritious and sustainable global food system.

New Multinational Approaches to Interdisciplinary Doctoral Education: Challenges and Opportunities for Collaborations on Global Food Resources

Dr. Gretchen Kalonji

Former Assistant Director General for
Natural Sciences, UNESCO

Universities worldwide increasingly recognize the necessity of transforming our doctoral programs to better prepare students for the professional lives of the future. Some elements are clear: we need to equip students to address challenges which are inherently interdisciplinary; to create stronger links with multiple sectors of society, and; to prepare students to collaborate effectively across national boundaries. New multinational models for interdisciplinary doctoral education offer incredible potential, but the challenges are also formidable. In this presentation we describe how the theme of “global food resources” could provide a platform for new, more powerful models of collaboration in interdisciplinary doctoral education.
