The 4th International Symposium of Gunma University Initiative for Advanced Research (GIAR)

**Date:** Tuesday, November 7th, 2017
**Venue:** Maebashi Chamber of Commerce and Industry

**Welcome address:**
9:30 ~ 9:35  Dr. Hiroshi Hiratsuka (President of Gunma Univ.)

**Session I: Omics approach in basic, translational and clinical research**

9:35 ~ 10:05  Coordinated Controls of checkpoints and metabolism by E4F1: Toward novel synthetic lethal approaches to cancer vulnerabilities
Dr. Claude Sardet (Montpellier cancer research institute, Univ. of Montpellier)

10:05 ~ 10:35  Bioinformatics to uncover gene essentiality and synthetic lethality in large data sets
Dr. Jacques Collinge (Montpellier cancer research institute, Univ. of Montpellier)

10:35 ~ 10:50  COFFEE BREAK

10:50 ~ 11:20  Clinical application of human iPS cells for the treatment of patients with severe congestive heart failure
Dr. Koji Fukuoka (Dept. of Cardiology, Keio Univ. Sch. of Medicine)

11:20 ~ 11:50  Discovery of a Novel Biomarker of Food Allergy
Dr. Takahisa Murata (Dept. of Animal Epidemiology, The Univ. of Tokyo)

11:50 ~ 12:20  A trans-omic reconstruction of insulin-dependent regulatory networks for metabolism
Dr. Katsuyuki Yagi (RIKEN Center for Integrative Medical Sciences)

**Luncheon Seminar**
12:30 ~ 13:15  Metabolome, metabolic flux, and targeted proteome analyses of the central carbon metabolism and data visualization using GARUDA platform
Dr. Fumio Matsuda (Dept. of Bioinformatic Engineering, Osaka Univ. Grad. Sch. of Information Science and Technology)

**Session II: GIAR – Diversity and Inclusion**

13:20 ~ 13:45  Dietary whole grain modifies microbiota and enhances production of trimethylated compounds associated with energy metabolism
Dr. Arii Hanninen (Dept. of Public Health and Clinical Nutrition, Univ. of Eastern Finland)

13:45 ~ 14:10  GTP Metabolic Switch leads to Nucleolar Transformation and Malignant Growth of Cancer Cells
Dr. Atsuo Sasaki (Dept. of Internal Medicine, Univ. of Cincinnati, College of Medicine)

14:10 ~ 14:35  Heading towards clinical implementation of omics-based medicine
Dr. Reika Sawabata (Dept. Molecular Pharmacology and Oncology, Gunma Univ. Grad. Sch. of Medicine)

14:35 ~ 15:00  Statistical methods for big data in medical research
Dr. Yasunori Sato (Dept. of Global Clinical Research, Chiba Univ. Grad. Sch. of Medicine)

15:00 ~ 15:15  COFFEE BREAK

15:15 ~ 15:40  Integrating Physics, Chemistry, Molecular and Cellular Biology, and Human Studies in Radiation Research
Dr. Kathryn D. Held (Massachusetts General Hospital / GIAR)

15:40 ~ 16:05  CERS6-dependent Sphingolipid Profile Regulates Lung Cancer Pathogenesis and Metastasis
Dr. Motoshi Suzuki (Fujita Health Univ. Sch. of Medicine, First Dept. of Pathology)

16:05 ~ 16:30  The effect of perinatal gadolinium based contrast agents (GBCAs) injection on adult mice behavior
Miski Aghnia Khairinisa (Dept. of Integrative Physiology, Gunma Univ. Grad. Sch. of Medicine)

16:30 ~ 16:55  New Strategies of the World Health Organization
Dr. Akinori Kama (GIAR- WHO Collaborative Research Lab.)

**Special lecture**
17:00 ~ 18:00  Lipid metabolism in health and disease
Dr. Takao Shimizu (Lipid Signaling project, National Center for Global Health and Medicine)

**Closing remark**
18:00 ~ 18:05  Dr. Takashi Izumi (GIAR chairperson/ Vice President of Gunma Univ.)