

## 13th International Symposium of Geriatrics and Gerontology

Theme: Cutting Edge of Aging Research

~ Integrated Circuit of Inflammation, Immunity and Cognitive Function~

Opening Remarks 9:20~9:25

Kenji Toba

**Session 1.** 9:25~11:45

### **Intervention of Targeted Senescent Cells and Restored Tissue Homeostasis**

Moderators: Kazutaka Akagi and Masataka Sugimoto

#### **1. Tohoku Medical Megabank Project**

##### **- A National Challenge to Realize Personalized Medicine**

Dr. Masayuki Yamamoto (35 min)

Executive Director, Tohoku Medical Megabank Organization

Professor, Division of Medical Biochemistry, Tohoku University Graduate School of Medicine

#### **2. Gateway Reflex, A New Concept in Neuroimmunology**

Dr. Masaaki Murakami (35 min)

Professor and Director, Molecular Neuroimmunology, Institute for Genetic Medicine, Hokkaido University

#### **3. Targeted Apoptosis of Senescent Cells Restores Tissue Homeostasis in Response to Chemotoxicity and Aging**

Dr. Marjolein P. Baar and Dr. Peter L. J. de Keizer (35 min)

Senior Scientist, Department of Molecular Genetics, Erasmus University Medical Center Rotterdam, Netherlands

#### **4. Cellular Senescence, Senolytics, Chronic Diseases, and Aging**

Dr. James L. Kirkland (35 min)

Director, Robert and Arlene Kogod Center on Aging, Mayo Clinic, USA

**Luncheon Seminar** 12:00~12:50

Moderator: Masahiko Bundo

Title: **Immunology, Inflammation and Central Nervous System**

Speaker: Dr. Takashi Kanda

Professor, Department of Neurology and Clinical Neuroscience, Yamaguchi University Graduate School of Medicine

**Session 2.** 13:00~14:45

**Molecular Screening and Imaging for Neural and Cognitive Function**

Moderators: Nobuyuki Kimura and Naoyuki Sato

**1. Deciphering Alzheimer's Disease Pathogenesis from Gene Co-Expression Networks**

Dr. Koichi M. Iijima (35 min)

Section Chief, Section of Genetics and Pathobiology, Department of Alzheimer's Disease Research, Center for Development of Advanced Medicine for Dementia, NCGG

**2. PET Imaging of Neuroinflammation in Neurodegenerative Diseases**

Dr. Yasuyuki Kimura (35 min)

Section Chief, Section of Imaging Molecules, Department of Clinical and Experimental Neuroimaging, Center for Development of Advanced Medicine for Dementia, NCGG

**3. In Vivo Depiction of Neuroinflammation on The Cholinergic System and Cognition in Humans**

Dr. Yasuomi Ouchi (35 min)

Professor, Department of Biofunctional Imaging, Hamamatsu University School of Medicine

**Session 3.** 15:00~16:45

**Age-Related Chronic Inflammatory Diseases and Systemic Dysfunction**

Moderators: Akiko Satoh and Kenji Matsushita

**1. Somatic Retrotransposition in Cellular Senescence and Aging**

Dr. John M. Sedivy (35 min)

Professor, Laboratories for Molecular Medicine, Department of Molecular Biology, Cell Biology and Biochemistry, Brown University, USA

**2. Impacts of Thymic Involution on Peripheral T Cell Homeostasis and Immunosenescence**

Dr. Yoko Hamazaki (35 min)

Professor, Department of Life Science Frontiers, Center for iPS Cell Research and Application (CiRA), Kyoto University

**3. Epigenetics of Lymphocyte Longevity/Senescence**

Dr. Stefano Casola (35 min)

Professor, Genetics of B cells and Lymphoma Unit, IFOM-FIRC Institute of Molecular Oncology Foundation, IFOM-IEO Campus, Italy

Closing Remarks 16:45~16:50

Mitsuo Maruyama