Day 1  August 24th (Fri.)

13:00  Opening Remarks  Sakae Tanaka
(Department of Orthopaedic Surgery, Faculty of Medicine, The University of Tokyo)

<Session I>
Moderator  Toshio Matsumoto (Department of Medicine and Bioregulatory Sciences, The University of Tokushima Graduate School of Medical Sciences)
13:05  Henry Morris Kronenberg (Harvard Medical School)
*How PTHrP regulates growth*

<Session II>
Moderator  Riko Nishimura (Department of Biochemistry, Osaka University of Graduate School of Dentistry)
Toshihisa Komori (Department of Cell Biology, Nagasaki University)
14:05  Noriyuki Tsumaki (Center for iPS Cell Research and Application, Kyoto University)
*Regulation of chondrocyte differentiation and reprogramming*
14:45  Ikuyo Inaba (Laboratory for Bone and Joint Diseases, RIKEN)
*A genome-wide association study of adolescent idiopathic scoliosis*
15:05  Toshihiro Chikanishi (TEIJIN Pharma Limited, Institute of Bio-Medical Research)
*An in vitro model for skeletal muscle force and atrophy, Myotransducer*

<Session III>
Moderator  Shigeaki Kato (Soma Central Hospital)
15:25  Kohei Miyazono (Department of Molecular Pathology, Graduate School of Medicine, The University of Tokyo)
*TGF-β signaling in regulation of cancer*

16:25  Coffee Break  (15min)

<Session IV>
Moderator  Takeshi Miyamoto (Keio Kanrinmaru project/ Orthopedic Surgery, Keio University School of Medicine)
Yasuhiro Kobayashi (Department of Cell Biology, Matsumoto Dental University)
16:40  Masamichi Takami (Department of Biochemistry, School of Dentistry, Showa University)
*Roles of innate immune system in bone metabolism*
17:00  Sakae Tanaka (Department of Orthopaedic Surgery, Faculty of Medicine, The University of Tokyo)
*Regulation of osteoclast function by Akt pathways*
17:40  Norihiro Kitagawa (Nara Institute of Science and Technology Graduate School of Biological Science)
*Siglec-15 regulates the formation of functional osteoclasts in concert with DAP12*
<Session V>
Moderator Yoshiya Tanaka (The First Department of Internal Medicine, University of Occupational and Environmental Health, Japan)
Akira Yamaguchi (Section of Oral Pathology, Graduate School of Tokyo Medical and Dental University)
18:00 Nobuyuki Udagawa (Department of Biochemistry, Matsumoto Dental University)
Mechanism of osteoclast formation in bone from their precursors
18:40 Norio Amizuka (Department of Developmental Biology of Hard Tissue, Division of Oral Health Science, Graduate School of Dental Medicine, Hokkaido University)
Morphological assessment for biological function of osteocytes

Welcome Reception
19:00 Greeting Toshiyuki Yoneda (Division of Hematology and Oncology, Indiana University School of Medicine)

Day 2 August 25th (Sat.)

<Session VI>
Moderator Toshiyuki Yoneda (Division of Hematology and Oncology, Indiana University School of Medicine)
8:30 Josef Penninger (The Institute of Molecular Biotechnology)
RANKL- from bone loss to breast cancer

<Session VII>
Moderator Takeshi Imamura (Ehime University Graduate School of Medicine)
Masahiro Abe (Department of Medicine and Bioregulatory Sciences, The University of Tokushima Graduate School of Medical Sciences)
9:30 Toshiyuki Yoneda (Division of Hematology and Oncology, Indiana University School of Medicine)
Acidic microenvironment plays a role in causing bone cancer pain
10:10 Mikihito Hayashi (Cell Signaling, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University)
Regulatory mechanisms of bone remodeling
10:30 Coffee Break ( 15min )

<Session VIII>
Moderator Seiji Fukumoto (Division of Nephrology and Endocrinology, Department of Internal Medicine, University of Tokyo Hospital)
Keiichi Ozono (Department of Pediatrics, Osaka University)
10:45 Koichi Matsuo (Laboratory of Cell and Tissue Biology, School of Medicine, Keio University)
Cell-cell interactions among osteoclasts and osteoblasts
11:25 Haruhiko Akiyama (Department of Orthopaedics, Kyoto University)
Inhibitory function of TRPV4 in osteoarthritis is mediated by Sox9 expression
11:45 Lunch ( 60min )
Session IX

Moderator Hiroshi Takayanagi (Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo)
Kazunori Imaizumi (Department of Biochemistry, Graduate School of Biomedical Sciences, Hiroshima University)

13:00 Hiroshi Asahara (Department of Systems BioMedicine, Tokyo Medical and Dental University, National Center for Children Health and Development)

*Macro View of micro RNA functions in cartilage development and osteoarthritis pathogenesis*

13:40 Yuuki Imai (Institute of Molecular and Cellular Biosciences, The University of Tokyo)

*Direct functions of sex steroid hormones in bone metabolism*

14:00 Shu Takeda (Department of Internal Medicine, Keio University School of Medicine)

*Role of vitamin E in bone remodeling*

14:20 Kana Miyamoto (Orthopedic Surgery, Keio University School of Medicine)

*Hematopoietic stem cell mobilization and osteoclast*

14:40 Closing remarks Shigeaki Kato (Soma Central Hospital)