

《9th Meeting of Bone Biology Forum Program : Honorifics omitted》

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- $\beta$  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)