

# ASBMR® 2016 Annual Meeting

September 16–19, 2016 | Atlanta, Georgia, USA | Georgia World Congress Center

## Onsite Program





## Human Osteoclasts Revealed by Time-lapse

Hospital/University of Southern Denmark,

## Regulated Bone Resorption Regulates Odontoblast

Jiang<sup>2</sup>, Zheng Zhu<sup>2</sup>, Zhihe Zhao<sup>3</sup>, Yi-Ping  
y of Alabama at Birmingham; State Key  
of Orthodontics, West China Hospital of  
states, <sup>2</sup>Department of Pathology, University of  
State Key Laboratory of Oral Diseases,  
Hospital of Stomatology, Sichuan University.

## SIGNAL TRANSDUCTION

ogenesis via Modulating Autophagy  
public of

## tion via RANKL-mediated NF- $\kappa$ B activation and

in Seong<sup>1</sup>, Shin-Yoon Kim<sup>2</sup>, Young-Ran Yoon<sup>3</sup>,  
& Matrix Research Institute, BK21 Plus KNU  
1 Trial Center, School of Medicine, Kyungpook  
public of, <sup>2</sup>Skeletal Diseases Genome Research  
National University, Korea, republic of

## Osteoclast Lineage

uki Imai<sup>3</sup>, Sohei Kitazawa<sup>1</sup>. <sup>1</sup>Ehime University  
ime University Hospital, Japan, <sup>3</sup>Ehime

## TNF- $\alpha$ Mediated L-plastin Phosphorylation and

clasts  
University of Maryland, Dental School, United

## 1 Osteoclast Differentiation and Function

Ha Kim<sup>2</sup>, Kabsun Kim<sup>2</sup>, Semun Seong<sup>3</sup>,  
ology, Medical Research Center for Gene  
al University Medical School, Korea, republic  
1 Research Center for Gene Regulation,  
ool, Korea, republic of, <sup>3</sup>Department of  
University Medical School, Korea, republic of

Positioning in mTORC1 Signaling in Osteoclasts  
ie Lacroix<sup>1</sup>, Celeste Owen<sup>2</sup>, Bowen Gao<sup>4</sup>, Paul  
Faculty of Dentistry, University of Toronto,  
for Sick Children, Canada, <sup>3</sup>Mount Sinai  
Canada, <sup>4</sup>Dalla Lana School of Public Health

## OSTEOCLASTS - FUNCTION: TRANSCRIPTIONAL REGULATION AND GENE EXPRESSION

SU0171 **Functional analysis of Cadm1 gene, involved in epigenetic regulation during osteoclastogenesis**  
Shinya Nakamura<sup>\*1</sup>, Naohiro Izawa<sup>1</sup>, Hiroyuki Aburatani<sup>2</sup>, Takeshi Miyamoto<sup>1</sup>, Sakae  
Tanaka<sup>1</sup>. <sup>1</sup>Orthopaedic Surgery & Spinal Surgery, The University of Tokyo, Tokyo, Japan,  
Japan, <sup>2</sup>Genome Science Division, Research Center for Advanced Science & Technology,  
The University of Tokyo, Tokyo, Japan, Japan  
*Disclosures: Shinya Nakamura, None*

SU0172 **Osteoclasts are Deficient in the Expression of Osteogenic Coupling Factors Following Ischemic Osteonecrosis Of The Femoral Head**  
Naga Suresh Adapala<sup>\*1</sup>, Harry K.W. Kim<sup>1</sup>, Ryosuke Yamaguchi<sup>1</sup>, Hicham Drissi<sup>2</sup>. <sup>1</sup>Texas  
Scottish Rite Hospital for Children, United states, <sup>2</sup>University of Connecticut Health  
Center, United states  
*Disclosures: Naga Suresh Adapala, None*

SU0173 **Supportive Role of CD44-ICD in RUNX2- Mediated Transcriptional Regulations in Prostate Cancer Cells**  
Linda Senbanjo<sup>\*</sup>, Meenakshi Chellaiah. University of Maryland Baltimore, United states  
*Disclosures: Linda Senbanjo, None*

## OSTEOCLASTS - ORIGIN AND CELL FATE: APOPTOSIS

SU0174 **Conditional Abrogation of *Atm* in Osteoclasts Leads to Reduced Bone Mass and Extended Osteoclast Lifespan**  
Toru Hirozane<sup>\*</sup>, Takahide Tohmonda, Masaki Yoda, Masayuki Shimoda, Yae Kanai,  
Morio Matsumoto, Hideo Morioka, Masaya Nakamura, Keisuke Horiuchi. Keio  
University School of Medicine, Japan  
*Disclosures: Toru Hirozane, None*

## OSTEOCLASTS - ORIGIN AND CELL FATE: GENERAL

SU0175 **Changes in Wnt Receptor Expression Accompany Altered Canonical Wnt Signaling in Osteoclast Progenitors with Aging or Ovariectomy**  
Stephanie Youssef<sup>\*</sup>, Ming Ruan, Christine Hachfeld, Glenda Evans, Joshua Farr, David  
Monroe, Sundeep Khosla, Jennifer Westendorf, Merry Jo Oursler, Megan Weivoda. Mayo  
Clinic, United states  
*Disclosures: Stephanie Youssef, None*

SU0176 **TMEM178 is a novel negative regulator of store operated calcium entry in osteoclasts**  
Zhengfeng Yang<sup>\*</sup>, Corrine Decker, Roberta Faccio. Department of Orthopaedic Surgery,  
Musculoskeletal Research Center, Washington University School of Medicine, United  
states  
*Disclosures: Zhengfeng Yang, None*

## OSTEOCYTES: BONE REMODELING REGULATION

SU0177 **24-Hour Profile of Serum Sclerostin and Its Association With Bone Biomarkers in Men**  
Christine Swanson<sup>\*1</sup>, Orfeu Buxton<sup>2</sup>, Steven Shea<sup>3</sup>, Sheila Markwardt<sup>3</sup>, Eric Orwoll<sup>3</sup>.  
<sup>1</sup>University of Colorado, United states, <sup>2</sup>Pennsylvania State University, United states,  
<sup>3</sup>Oregon Health & Science University, United states  
*Disclosures: Christine Swanson, None*

SU0178 **Activation of AMP-activated Protein Kinase Decreases RANKL Expression and Increases Sclerostin Expression by Inhibiting the Mevalonate Pathway in Osteocytic MLO-Y4 Cells**  
Ippei Kanazawa<sup>\*</sup>, Maki Yokomoto-Umakoshi, Ayumu Takeno, Ken-ichiro Tanaka,  
Masakazu Notsu, Toshitsugu Sugimoto. Shimane University Faculty of Medicine, Japan  
*Disclosures: Ippei Kanazawa, None*

SU0179 **Alternation in Gap-junctional Intercellular Communication Capacity During the Ex Vivo Transformation of Osteocytes in the Embryonic Chick Calvaria**  
Ziyi Wang<sup>\*</sup>, Naoya Odagaki, Tomoyo Tanaka, Mana Hashimoto, Hiroshi Kamioka<sup>\*</sup>.  
Okayama University Graduate School of Medicine, Dentistry & Pharmaceutical Sciences,  
Department of Orthodontics, Japan  
*Disclosures: Hiroshi Kamioka, None*