ASBMR®

The American Society for
Bone and Mineral Research

ASBMR TOPICAL MEETING:

Bone and Skeletal Muscle Interactions

July 17–18, 2012
Kansas City, Missouri, USA

Pre-Meeting Workshop
July 16, 2012

Register now!

ASBMR TOPICAL MEETING:

Bone and Skeletal Muscle Interactions

Osteoporosis and sarcopenia are major contributors to frailty in the elderly population and are growing public health problems. Although muscle loading of bone clearly plays a role in their interaction, little is known about potential cellular and molecular mechanisms.

This “state of the science” topical meeting will draw together leading muscle and bone researchers to exchange ideas, develop new collaborations and accelerate the emerging scientific discoveries in the area of muscle and bone interactions.

Program Highlights:

- What are the cellular and molecular mechanisms responsible for the positive effects of exercise on general well being?
- Why do fractures heal better with muscle covering the fracture?
- Do muscle and bone have similar responses to factors such as IGFs, wnts, androgens, nutritional macronutrients, other factors/hormones?
- Can both muscle and bone be regenerated simultaneously?
- What mechanisms are involved in the parallel loss of muscle and bone with increasing age?

Who Should Attend?

Our goal is to bring together investigators currently working in the areas of muscle and bone metabolism who are interested in the potential interactions and crosstalk between these two tissues.

This includes young investigators, NIH-funded investigators, industry scientists, clinicians interested in sarcopenia and osteoporosis, as well as geriatricians and gerontologists with an interest in aging and bone.

Pre-Meeting Workshop

ASBMR is hosting a Pre-Meeting Workshop in conjunction with the University of Missouri – Kansas City School of Dentistry on July 16th. This hands-on workshop, chaired by Mark L. Johnson, Ph.D., Charlotte L. Phillips, Ph.D. and Marco Brotto, MSN, Ph.D., will provide participants with an opportunity to learn and practice various techniques related to the analysis of bone and muscle. Participants will select from modules involving bone imaging, biomechanical testing and structural properties analysis, bone and muscle histology, muscle functional testing, bone-muscle immobilization, isolation of primary bone and muscle cells, live imaging of bone and muscle cells and in-vitro and in-vivo loading of bone and muscle. The workshop is limited to the first 50 registrants so register early! Please indicate your interest during the registration process.

Registration

Attendees may register online or by using the downloadable PDF form at **www.asbmr.org**. Register **on or before Thursday, June 14, 2012** to receive the Early Registration discount. Early registration fees are $320 for ASBMR members; $370 for non-members; $150 for residents, students and fellows and $250 for government employees and allied health professionals. The Pre-Meeting Workshop is $85. After June 14th, fees will increase by up to $100.

Dine Around with Speakers

Attendees will have the opportunity to network with leading bone and muscle researchers during the Dine Around on Tuesday evening, July 17. Please indicate your interest in participation during the registration process.

Hotel Information

All sessions and events will take place at the Westin Kansas City at Crown Center with the exception of the Pre-Meeting Workshop on Monday, July 16 which is being held on the adjacent campus of the University of Missouri's Dental School.

The hotel is located in the heart of downtown Kansas City, ranked by *Forbes* as one of the top 10 downtowns in the U.S. Be sure to book a room in the ASBMR room block and explore Kansas City's vibrant, walkable communities.

The ASBMR discount rate is $125 for single or double occupancy. Wireless high-speed internet is included in this rate for all ASBMR attendees who book in the block. **The reservation cut-off date is Tuesday, June 19, 2012**.

Make reservations online at **http://www.asbmr.org/TopicalMeetings/Hotel.aspx** or by phone at (816) 474-4400.

"Emerging data suggests that muscle does more than just load bone, that cellular and biochemical communication is occurring between the two tissues from development through aging. This meeting will bring together investigators with the goals of discovering how these two tissues interact to ensure optimal function of each organ."

– Lynda F. Bonewald, Ph.D. University of Missouri, Kansas City, MO

"Muscle and bone interact through various mechanisms, not all of which are completely understood. It is key for muscle and bone researchers to come together at this meeting, for the purpose of better understanding the complex relationship between the two tissues."

– Roger A. Fielding, Ph.D., Tufts University, Boston, MA

Continuing Medical Education (CME)

Learning Objectives

1. To begin to understand the close association between muscle and bone during development and growth and how nutrition and physical activity affect general health.
2. To dissect the association between sarcopenia and osteoporosis and determine what role aging plays in these processes.
3. To identify molecular and cellular mechanisms responsible for the close association between muscle and bone in both health and disease and with aging.
4. To define defective mechanotransduction in both muscle and bone and identify means to treat musculoskeletal disease.
5. To identify means to prevent, treat, or reverse muscle and bone loss.
6. To determine if muscle communicates with bone independent of mechanical loading.
7. Based on the proceedings of the meeting, assess the feasibility of establishing a combined research field that integrates muscle and bone physiology in order to generate a better understanding of how these two tissues integrate and crosstalk in both health and disease

Accreditation Statement

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the Institute for the Advancement of Human Behavior (IAHB) and the American Society for Bone and Mineral Research (ASBMR). The IAHB is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation Statement

The IAHB designates this live activity for a maximum of *22 AMA PRA Category 1 Credit(s)™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Detailed program information can be found at www.asbmr.org.

Faculty

Stephen F. Badylak, D.V.M., Ph.D., M.D., *University of Pittsburgh, Pittsburgh, PA, USA*

Susan A. Bloomfield, Ph.D., *Texas A&M University, College Station, TX, USA*

Vincent J. Caiozzo, Ph.D., *University of California, Irvine, CA, USA*

Thomas L. Clemens, Ph.D., *Johns Hopkins University, Baltimore, MD, USA*

Dawn DW Cornelison, Ph.D., *University of Missouri, Columbia, MO, USA*

Steven R. Cummings, M.D., *San Francisco Coordinating Center, San Francisco, CA, USA*

Bess Dawson-Hughes, M.D., *Tufts University, Boston, MA, USA*

Mark A. Febbraio, Ph.D., *Baker IDI Heart & Diabetes Institute, Melbourne, Australia*

David Glass, M.D., *Novartis Institutes for BioMedical Research Inc, Cambridge, MA, USA*

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Joseph A. Houmard, Ph.D., *East Carolina University, Greenville, NC, USA*

Mark L. Johnson, Ph.D., *University of Missouri, Kansas City, MO, USA*

Lyndon Joseph, Ph.D., *National Institute on Aging, NIH, Bethesda, MD, USA*

Gerard Karsenty, M.D., Ph.D., *Columbia University Medical Center, New York, NY, USA*

Sundeep Khosla, M.D., *Mayo Clinic, Rochester, MN, USA*

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Clinton T. Rubin, Ph.D., *Stony Brook University, Stony Brook, NY, USA*

Stephanie A. Studenski, M.D., M.P.H., *University of Pittsburgh, Pittsburgh, PA, USA*

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Karen Winer, M.D., *National Institute of Child Health and Human Development, NIH, Bethesda, MD, USA*

Elazar Zelzer, Ph.D., *Weizmann Institute of Science, Rehovot, Israel*

Teresa A. Zimmers, Ph.D., *Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA, USA*

Organizing Committee

Lynda F. Bonewald, Ph.D. (Chair), *University of Missouri, Kansas City, MO, USA*

Roger A. Fielding, Ph.D., (Co-Chair), *Tufts University, Boston, MA, USA*

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Important Dates

Please note the following critical deadlines:

- Attendees may receive the Early Registration discount through **Thursday, June 14, 2012**.
- Discounted housing rates will be available through **Tuesday, June 19, 2012**.

For more information, please contact:

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