

V V V

October 4–7, 2013 Baltimore, Maryland USA

Preliminary Program

The American Society for Bone and Mineral Research 2025 M Street NW, Suite 800 | Washington, DC 20036-3309, USA Phone: +1 (202) 367-1161 | Fax: +1 (202) 367-2161 Email: asbmr@asbmr.org

Register Now at www.asbmr2013.org

Contents

Join us in Baltimore this Fall!

On behalf of ASBMR, I would like to invite you to join us October 4 – 7 in Baltimore, Maryland, USA for the ASBMR 2013 Annual Meeting.

This year's program co-chairs, Richard Eastell and Laurie McCauley, have created an exciting scientific program featuring the latest scientific discoveries in bone, mineral and musculoskeletal research. You're sure to make contact with colleagues and collaborators while establishing new contacts from around the world. You will learn new concepts and return home from the ASBMR 2013 Annual Meeting with novel ideas for your own research.



Keep Up With New Findings

Attendees have the opportunity to choose from over 100 sessions, including our Meet-the-Professor series, Distinguished Oral presentations, clinical roundtables, and topical symposia. This year's Gerald D. Aurbach Lecture, 'Wnt Signaling and Stem Cell Control,' will be presented by Roel Nusse, Ph.D., while the Louis V. Avioli lecture will be given by

Jane Lian, Ph.D., and will highlight 'Epigenetic Regulation of Skeletal Biology and Pathology'. Also, this year for the first time, the ASBMR will hold a symposium, 'Cutting Edge Discoveries in Muscle Biology, Disease and Therapeutics,' the day before the Annual Meeting. Karyn Esser and Kevin Conley, as coorganizers, have put together a very informative program on muscle biology.



Connect With Colleagues

The ASBMR 2013 Annual Meeting offers numerous opportunities to meet and engage your peers. You can once again take advantage of the ASBMR Networking Center, located in the Discovery Hall, as a dedicated venue for gathering with colleagues both old and new. Networking breaks are scheduled regularly throughout the conference.

All attendees are invited to our Welcome Reception and Plenary Poster Session on Friday, October 4, and special networking events for Young Investigators and first-time attendees will be taking place at the same time. In addition, we will be hosting our social networking event on Saturday evening, October 5 at the Maryland Science Center in Baltimore's Inner Harbor—don't miss it!



Discover New Tools

The Discovery Hall is the place to be to interact and have lively, exciting discussions. The hall will contain approximately 1,500 poster presentations and will once again offer the 'Knowledge X-Change,' an interactive forum where you can participate in small-group discussions on the most current issues in bone and mineral research. The

Discovery Hall will also feature the Laboratory Showcase to display the newest technology and instrumentation in the field.

The ASBMR Annual Meeting is the meeting to see and hear the latest science, re-connect and make new connections, and explore cutting-edge products and services for your laboratory. Be a part of the excitement—register on or before August 8th to

excitement—register on or before August 8th to receive the advance registration discount.

Fynde 7. Someword

We'll see you in Baltimore!

Lynda F. Bonewald, Ph.D. ASBMR President



2013 Scientific Program Committee

ASBMR President Lynda F. Bonewald, Ph.D. University of Missouri -Kansas City (USA)

Program Co-Chairs

Richard Eastell, M.D., FRCP University of Sheffield (United Kingdom)

Laurie McCauley, D.D.S., Ph.D. University of Michigan (USA)

Contents

Schedule-at-a-Glance (Official Scientific Program Overview)

FRIDAY, OCTO	BER 4 Click on the topics for more information
7:30 am – 8:00 am	Morning Networking
8:00 am – 9:30 am	Gerald D. Aurbach Lecture: Wnt Signaling and Stem Cell Control – Roel Nusse, Ph.D.
9:30 am – 10:00 am	Networking Break
10:00 am – 11:00 am	Distinguished Orals
	Meet-the-Professor Sessions
10:00 am – 11:30 am	Meeting Overview for Health Professionals
	Grant Writing Workshop: Mock Study Section
11:00 am – 11:30 am	Networking Break
11:30 am – 12:45 pm	Symposium - Greg Mundy Memorial Session: Malignancy and Bone
	Symposium - Sarcopenia/Osteopenia: One Affliction?
12:45 pm – 1:15 pm	Networking Break
1:15 pm – 2:30 pm	Symposium - Personalized Medicine: Application to Bone Diseases
	Symposium – FGF–2013
2:30 pm – 3:00 pm	Networking Break
2:45 pm – 4:00 pm	Symposium - What's Hot in Inflammatory Bone Disease
3:00 pm – 4:00 pm	ASBMR/ECTS Clinical Debate - Treatments Developed for Fracture Prevention in Osteoporosis Can Be Used in Patients with Chronic Kidney Disease
4:15 pm – 5:45 pm	Oral Poster Presentations
5:45 pm – 7:00 pm	Welcome Reception & Plenary Poster Session
7:15 pm – 8:00 pm	Young Investigator and Minority Investigator Networking Hour
8:00 pm – 10:00 pm	Speed Networking Event

SATURDAY, OC	TOBER 5 Click on the topics for more information
6:45 am – 8:00 am	ASBMR Networking Breakfast
7:30 am – 8:00 am	Morning Networking
8:00 am – 10:00 am	Distinguished Orals
10:00 am – 10:30 am	Discovery Hall Networking
10:30 am – 11:30 am	Success in Research: Leadership Lessons from 2013 ASBMR Esteemed Awardees
10:30 am – 12:00 pm	Oral Poster Presentations
11:00 am – 12:00 pm	Meet-the-Professor Sessions
12:00 pm – 2:00 pm	Poster Session I and Poster Tours
1:00 pm – 2:00 pm	Clinical Roundtable/Case Conference - Interpretation of Clinical
	Laboratory Testing
2:00 pm – 3:00 pm	Louis V. Avioli Lecture: Epigenetic Regulation of Skeletal Biology and Pathology - Jane Lian, Ph.D.
3:15 pm – 4:15 pm	Concurrent Orals
4:15 pm – 4:45 pm	Discovery Hall Networking
4:45 pm – 6:00 pm	State-of-the-Art Lectures – Osteocytes Take Center Stage
	Symposium – Hidden Regulators of Skeletal Metabolism: Energy, Fat, Fluid
6:30 pm – 8:30 pm	Basic Distinguished Oral Presentations and Networking Reception
	Clinical Evening at ASBMR - Do Our Treatments for Osteoporosis Harm Our Patients?
8:30 pm – 11:30 pm	ASBMR Bone Bash – A Premier Networking Event at the Maryland Science Center

Schedule-at-a-Glance (Official Scientific Program Overview)

SUNDAY, OCTO	BER 6 Click on the topics for more information
7:30 am – 8:00 am	Morning Networking
8:00 am – 10:00 am	Distinguished Orals
10:00 am – 10:30 am	Discovery Hall Networking
10:30 am – 11:30 am	Funding Opportunities in a Changing NIH Landscape
10:30 am – 12:00 pm	Oral Poster Presentations
11:00 am – 12:00 pm	Meet-the-Professor Sessions
12:00 pm – 2:00 pm	Poster Session II and Poster Tours
1:00 pm – 2:00 pm	Clinical Roundtable/Case Conference - Treating Osteoporosis Associated with Chronic Kidney Disease
2:00 pm – 3:15 pm	Plenary Symposium - Sclerostin: The Journey from Discovery to Application
3:30 pm – 4:30 pm	Concurrent Orals
4:30 pm – 5:00 pm	Discovery Hall Networking
4:45 pm – 6:00 pm	State-of-the-Art Lectures – Bringing Back Muscle and Bone
	Symposium – Ensuring the Implementation of Clinical Guidelines
6:00 pm – 7:00 pm	ASBMR Town Hall Meeting

MONDAY, OCT	OBER 7 Click on the topics for more information
7:30 am – 8:00 am	Morning Networking
8:00 am – 10:00 am	Distinguished Orals
10:00 am – 10:30 am	Discovery Hall Networking
10:30 am – 11:30 am	Career Development: Collaboration 101
10:30 am – 12:00 pm	Oral Poster Presentations
11:00 am – 12:00 pm	Meet-the-Professor Sessions
12:00 pm – 2:00 pm	Poster Session III and Poster Tours
1:00 pm – 2:00 pm	Clinical Roundtable/Case Conference - Monitoring Treatment Response in Osteoporosis
2:00 pm – 3:15 pm	Plenary Symposium – Up and Coming Treatments for Bone Disease
3:30 pm – 5:00 pm	Concurrent Orals
5:00 pm – 6:00 pm	Closing Reception

Plenary Lectures

Gerald D. Aurbach Lecture Friday, October 4 / 8:00 am - 9:30 am

Wnt Signaling and Stem Cell Control

Roel Nusse, Ph.D., Howard Hughes Medical Institute (USA) and Stanford University School of Medicine



Our laboratory is interested in the growth, development, and integrity of animal tissues. We study multiple different organs, trying to identify common principles, and we extend

these investigations to cancer and injury repair. In most organs, different cell types are generated by stem cells — cells that also make copies of themselves and thereby maintain the tissue. An optimal balance between the number of stem and differentiated cells is essential for the proper function of the organs. Locallyacting signals are important to maintain this balance in a spatially-organized manner, and these signals are key to understanding the regulation of growth.

A common theme in our work is Wnt signaling. Work from many laboratories, including our own, has shown that Wnt proteins are essential for the control over stem cells, including stem cells controlling bone growth. How this is achieved is far from clear and is the subject of studies in the lab, both in vivo and in cell culture. In vivo, a particular question we address is how physiological changes, such as those occurring during hormonal stimuli, injury or programmed tissue degeneration, have an impact on the self-renewal signals and on stem cell biology.

Identifying stem cells in tissues requires us to label the cells and to track their developmental fate. We approach this question by lineage tracing and transplantation experiments, using the Wnt target gene Axin2. We have inserted the Cre-ERT2 gene into the Axin2 locus. In combination with reporters such as mTmG, we can mark the Axin2-expressing, Wnt-responsive cells and their descendants. We found that this protocol labels stem cells in multiple organs, including the mammary gland, intestine, and in the bone.

About Dr. Roel Nusse

Dr. Roel Nusse is a professor in the Department of Developmental Biology at Stanford University School of Medicine, the Virginia and Daniel K. Ludwig Professor of Cancer Research and a Howard Hughes Medical Institute Investigator. He is a member of the Institute for Stem Cell Biology and Regenerative Medicine at Stanford and the Stanford Ludwig Center for Cancer Stem Cell Research and Medicine.

Dr. Nusse received his Ph.D. from the Netherlands Cancer Institute at the University of Amsterdam in 1980. He completed his postdoctoral studies at the University of California, San Francisco in 1982 working with Dr. Harold Varmus. After several years as head of the molecular biology department at the Netherlands Cancer Institute, he returned to the Bay Area and joined the Stanford medical faculty in 1990 as an associate professor of developmental biology. In 1994 he was promoted to professor. In 1997 he became associate chair of the Department of Developmental Biology, and in 1999 he was appointed chair of the department. In 2010, he was elected as a member of the National Academy of Sciences. Dr. Nusse is also a fellow of the American Academy of Arts and Sciences and a member of the Royal Dutch Academy of Sciences.

Contents

Plenary Lectures (continued)

Louis V. Avioli Lecture Saturday, October 5 / 2:00 pm – 3:00 pm

Epigenetic Regulation of Skeletal Biology and Pathology Jane Lian, Ph.D., University of Vermont (USA)



Epigenetic mechanisms involve non-DNA encoded regulation of gene expression that is transmitted from parental to progeny cells. These processes include DNA methylation that silences genes, modification

of core histones for chromatin folding, and accessibility to transcriptional complexes and the emerging epigenetic role of microRNAs that provide oversight in managing biological processes. These epigenetic mechanisms can be synergistic, antagonistic or mutually exclusive in regulating the distribution of regulatory information during cell division, development, and differentiation. This presentation will first review the fundamental parameters of epigenetic control and mechanisms operative in cellular epigenetic memory; then, a focus on the current knowledge of cohorts of combinatorial and cumulative epigenetic marks that are conveyed through generations for regulating cell fate and differentiation of osteogenic lineage cells. This presentation will examine how histone modifications and microRNAs have identified novel gene regulatory mechanisms to poise, attenuate and activate genes during osteoblast differentiation for regulation of bone formation. This research provides a better understanding of mechanisms associated with genetically determined diseases that could be translated to altering progression of skeletal disorders.

About Dr. Jane Lian

Jane B. Lian, Ph.D. is a professor of biochemistry at the University of Vermont College of Medicine, Co-Director of Translational Research for the Vermont Cancer Center and a visiting professor, in the Department of Orthopedic Surgery and Musculoskeletal Center of Excellence, University of Massachusetts Medical School. Her research programs, with the team of GS Stein, JL Stein, AJ van Wijnen and M. Montecino, have contributed to many discoveries related to the cellular and molecular regulatory controls for osteoblast differentiation and bone formation. Through studies of the bone specific osteocalcin gene and the Runx transcription factors, both genetic and epigenetic mechanisms required for normal skeletal development have been established. Runx functions include chromatin remodeling of genes, mitotic bookmarking of chromosomes for preserving cellular identity, and regulation of microRNA-controlled networks that support lineage commitment and activity of osteogenic pathways. Research from their laboratories has shown how deregulation of these functions contribute to skeletal abnormalities and tumor cell activities. These studies have been recognized by the William F. Neuman Award of the American Society for Bone and Mineral Research and awards from the American Academy of Orthopedic Surgeons. Dr. Lian was the 2009-10 President of the American Society for Bone and Mineral Research. She currently serves on the NIDCR Council and the executive board of the International Conference of Chemistry and Biology of Mineralized Tissues. Current research programs are supported by NIH grants from NIDCR (Merit Award); NIAMS and NCI. Disclosure: Pfizer Research Idea Award.

Contents

Symposia

Symposia are sessions that feature three to four invited talks covering basic and/or clinical topics.

Friday, October 4, 2013

Symposium – Greg Mundy Memorial Session: Malignancy and Bone 11:30 am – 12:45 pm

Co-Chairs: *Philippe A.R. Clezardin, Ph.D., INSERM and University of Lyon (France)*

T. John Martin, M.D., St. Vincent's Institute of Medical Research (Australia)

Cancer Cells and their Bone Marrow Niche *Russell Taichman, D.M.D., University of Michigan (USA)*

Immune Regulation of the Tumor/Bone Vicious Cycle Roberta Faccio, Ph.D., Washington University in St. Louis (USA)

Stress, Depression and Skeletal Metastasis

Florent Elefteriou, Ph.D., Vanderbilt University (USA)

Symposium – Sarcopenia/Osteopenia: One Affliction?

11:30 am – 12:45 pm

Co-Chairs: Thomas Clemens, Ph.D., Johns Hopkins University (USA)

Douglas Kiel, M.D., MPH, Hebrew SeniorLife (USA)

Shared and Individual Risk Factors for Bone and Muscle Loss with Age

Tamara Harris, M.D., MS, National Institute on Aging (USA)

Muscle and Bone Interactions: Is Fat the Common Denominator?

Clifford Rosen, M.D., Maine Medical Center (USA)

Exercise and Mechanical Signals: Surprises Regarding the Effect of Vibration on Bone and Muscle

Clinton Rubin, Ph.D., State University of New York at Stony Brook (USA)

Symposium – FGF-2₀₁**3** 1:15 pm – 2:30 pm

Co-Chairs: Reinhold Erben, D.V.M., M.D., University of Veterinary Medicine (Austria)

Harold Jueppner, M.D., Massachusetts General Hospital (USA)

PTH-FGF23-Klotho: Who Is In Charge? Beate Lanske, Ph.D., Harvard School of Dental

Beate Lanske, Ph.D., Harvard School of Dental Medicine (USA)

FGF23: Emerging Concepts and Controversies

L. Darryl Quarles, M.D., University of Tennessee Health Sciences Center (USA)

Role of FGF23 in Cardiovascular Disease Myles Wolf, M.D., MMSc, University of Miami (USA)

Symposium – Personalized Medicine: Application to Bone Diseases 1:15 pm – 2:30 pm

Co-Chairs:

Steven Cummings, M.D., San Francisco Coordinating Center (USA)

Charles Farber, Ph.D., University of Virginia (USA)

Introduction Charles Farber, Ph.D., University of Virginia (USA)

Genetics of Bone and Joint Disease: From Genome to Personalized Medicine Shiro Ikegawa, M.D., Ph.D., RIKEN (Japan)

Genomic Medicine For Bone and Mineral Diseases in Children Stephen Kingsmore, MB, ChB, BAO, DSc, FRCP, Children's Mercy Hospital (USA)

Personalized Medicine and Bone Steven Cummings, M.D., San Francisco Coordinating Center (USA)

Follow the excitement and opportunities...



Symposia are sessions that feature three to four invited talks covering basic and/or clinical topics.

Friday, October 4, 2013 (continued)

Symposium – What's Hot in Inflammatory Bone Disease

2:45 pm – 4:00 pm

Co-Chairs:

Joseph Lorenzo, M.D., University of Connecticut Health Center (USA)

Natalie Sims, Ph.D., St. Vincent's Institute of Medical Research (Australia)

Effects of Inflammation in Bone

Nancy Lane, M.D., University of California, Davis (USA)

The Contribution of Osteoblasts/Osteocytes to Inflammatory Mediated Periodontal Disease

Dana Graves, D.D.S., DMSc, University of Pennsylvania (USA)

The Role of Inflammation in the Pathogenesis and Progression of Osteoarthritis

Steven Abramson, M.D., NYU Langone Medical Center (USA)

Saturday, October 5, 2013

State-of-the-Art Lectures – Osteocytes Take Center Stage

Supported by an educational grant from Lilly USA, LLC.

4:45 pm - 6:00 pm

Co-Chairs:

Gerald Atkins, Ph.D., University of Adelaide (Australia)

Hiroshi Kamioka, D.D.S., Ph.D., Okayama University (Japan)

Osteocytes as Regulatory and Secretory Cells

Charles O'Brien, Ph.D., University of Arkansas for Medical Sciences (USA)

Osteocytes and Hematopoiesis

Paola Divieti Pajevic, M.D., Ph.D., Massachusetts General Hospital, Harvard Medical School (USA)

Osteocytes in Motion

Sarah Dallas, Ph.D., University of Missouri - Kansas City (USA)

Symposium – Hidden Regulators of Skeletal Metabolism: Energy, Fat, Fluid 4:45 pm – 6:00 pm

Co-Chairs:

Stavroula Kousteni, Ph.D., Columbia University Medical Center (USA)

Jennifer Walsh, MRCP, Ph.D., University of Sheffield (United Kingdom)

AP1 Transcription in the Hypothalamus

Regulates Bone and Energy Homeostasis Roland Baron, D.D.S., Ph.D., Harvard School of Medicine and of Dental Medicine (USA)

Sodium Homeostasis and Bone Joseph G. Verbalis, M.D., Georgetown University Medical Center (USA)

Insights into the Biology of Adipose Tissues and Bone

Ormond MacDougald, Ph.D., University of Michigan Medical School (USA)

Follow the excitement and opportunities...



Symposia are sessions that feature three to four invited talks covering basic and/or clinical topics.

Sunday, October 6, 2013

Plenary Symposium – Sclerostin: The Journey from Discovery to Application

Supported by educational grants from Lilly USA, LLC and Merck & Co., Inc. 2:00 pm – 3:15 pm

Co-Chairs:

Benjamin Leder, M.D., Massachusetts General Hospital, Harvard Medical School (USA)

Michaela Kneissel, Ph.D., Novartis Institutes for Biomedical Research (Switzerland)

Lessons from Human Genetic Diseases

Socrates Papapoulos, M.D., Leiden University Medical Center (Netherlands)

Circulating Sclerostin as a Marker of Bone Health and Disease

Matthew Drake, M.D., Ph.D., Mayo Clinic College of Medicine (USA)

Sclerostin Antagonism: Clinical Applications and Therapeutic Potential

John Bilezikian, M.D., Columbia University College of Physicians and Surgeons (USA)

State-of-the-Art Lectures – Bringing Back Muscle and Bone

Supported by an educational grant from Merck & Co., Inc.

4:45 pm – 6:00 pm

Co-Chairs: Karl Jepsen, Ph.D., University of Michigan (USA)

Tingting Tang, Ph.D., Shanghai Ninth People's Hospital (Peoples Republic of China)

Assessing the Regenerative Potential of Skeletal Tissues by Mesenchymal Progenitor Cells

David Rowe, M.D., University of Connecticut Health Center (USA)

Biologic Scaffolds for Reconstruction of Functional Skeletal Muscle

Stephen Badylak, DVM, M.D., Ph.D., University of Pittsburgh (USA)

Regenerative Engineering Cato Laurencin, M.D., Ph.D., University of Connecticut (USA)

Symposium – Ensuring the Implementation of Clinical Guidelines 4:45 pm – 6:00 pm

Co-Chairs:

Juliet Compston, M.D., FRCP, University of Cambridge (United Kingdom)

David Kendler, M.D., FRCPC, University of British Columbia (Canada)

Secondary Prevention of Fractures J. Timothy Harrington, M.D., University of Wisconsin (USA) (Retired)

Glucocorticoid-Induced Osteoporosis: From International Guidelines to Evidence Implementation

Kenneth Saag, M.D., University of Alabama at Birmingham (USA)

Cancer Treatment-induced Bone Loss in Early Breast and Prostate Cancer

Jean-Jacques Body, M.D., Ph.D., CHU Brugmann (Belgium)

Follow the excitement

and opportunities...



Symposia are sessions that feature three to four invited talks covering basic and/or clinical topics.

Monday, October 7, 2013

Plenary Symposium – Up and Coming Treatments for Bone Disease

Supported by educational grants from Lilly USA, LLC and Merck & Co., Inc.

2:00 pm – 3:15 pm

Co-Chairs:

Michael Econs, M.D., Indiana University School of Medicine (USA)

John Eisman, MBBS, Ph.D., Garvan Institute of Medical Research (Australia)

Hypophosphatasia: Bone-Targeted Enzyme-Replacement Therapy

Michael Whyte, M.D., Shriners Hospital for Children (USA)

Prospects for FGF-23 Antibody Therapy

Seiji Fukumoto, M.D., Ph.D., University of Tokyo Hospital (Japan)

Osteoporosis, Cathepsin K Enzyme Inhibition Bente Langdahl, M.D., Aarhus University Hospital (Denmark)



The Meet-the-Professor Sessions are informal sessions designed to provide an opportunity for meeting attendees to interact with experts in an intimate setting and discuss specific clinical and research topics. The sessions will be held Friday through Monday. Please be sure to purchase a Meet-the-Professor Handout Booklet that contains all the handouts supplied by the professors. The booklet can be purchased for \$10 when you register, and can be picked up on site at the Convention Center. Handout booklets will also be available in PDF format for download free of charge prior to the meeting.

Please Note:

Tickets are not required for these sessions; however, space is extremely limited. Interested individuals are welcome to attend these sessions on a first-come, first-served basis. Room restrictions and professor preferences will dictate number of attendees.

Thuay, October 4, 10.00 all	1 11.00 dill	
ТОРІС	SPEAKER	ТҮРЕ
Functional Analysis of Bone During Growth and Aging	Karl Jepsen, Ph.D., University of Michigan (USA)	Basic
TGF-beta Influences on Bone Metabolism and Coupling of Resorption to Formation	Merry Jo Oursler, Ph.D., Mayo Clinic (USA)	Basic
Effects of Osteoporosis Therapeutics on Osteocytes	Teresita Bellido, Ph.D., Indiana University (USA)	Basic
Alternatives to Bisphosphonates for Osteoporosis Treatment	Rene Rizzoli, M.D., Geneva University Hospital (Switzerland)	Clinical
Paget's Disease	Timothy Cundy, M.D., University of Auckland (New Zealand)	Clinical
Prediction of Fracture Risk	John Kanis, M.D., University of Sheffield (Belgium)	Clinical
Growth and Nutritional Disorders and Bone	Madhusmita Misra, M.D., MPH, Massachusetts General Hospital (USA)	Translational
Interaction of PTH and b-adrenergic Receptor	Jean-Pierre Vilardaga, Ph.D., M.S., University of Pittsburgh (USA) and Masaki Noda, M.D., Ph.D., Tokyo Medical and Dental University (Japan)	Translational
Breast and Prostate Cancer: Cellular Mechanisms of Skeletal Metastasis	Theresa Guise, M.D., Indiana University (USA) and Evan Keller, D.V.M., Ph.D., University of Michigan (USA)	Translational

Friday, October 4, 10:00 am – 11:00 am

Contents

Continued from page 11

Saturday, October 5, 11:00 am – 12:00 pm

ТОРІС	SPEAKER	ТҮРЕ
Mechanics Matters	Clinton Rubin, Ph.D., State University of New York at Stony Brook (USA) and Janet Rubin, M.D., University of North Carolina, Chapel Hill (USA)	Basic
Models of Calcium Sensing Receptor Action	Wenhan Chang , Ph.D., University of California, San Francisco (USA)	Basic
Notch Signaling	Ernie Canalis, M.D., St. Francis Hospital & Medical Center (USA)	Basic
Medical Treatment of Osteoporosis in the Elderly	Cathleen Colon-Emeric, M.D., M.S., Duke University Medical Center (USA)	Clinical
Identification of Vertebral Fractures	Judith Adams, MBBS, FRCR, Manchester Royal Infirmary, (United Kingdom)	Clinical
Primary Hyperparathyroidism	Mark Cooper, M.D., Ph.D., University of Sydney (Australia) and Maria Luisa Brandi, M.D., Ph.D., University of Florence (Italy)	Clinical
Steroids and Bone Health in Children	Mary Leonard, M.D., Children's Hospital of Philadelphia (USA)	Clinical
Impact of Diabetes and Bone: Cell and Molecular Mechanisms	Laura McCabe, Ph.D., Michigan State University (USA)	Translational
Vitamin D in Pregnancy	Christopher Kovacs, M.D., Memorial University of Newfoundland (Canada) and Nicholas Harvey, MBBChir, University of Southampton (United Kingdom)	Translational

Continued from page 12

Sunday, October 6, 11:00 am – 12:00 pm

ТОРІС	SPEAKER	ТҮРЕ
Tracking Effects of Osteoporotic Drugs on Bone Material Properties in Animal Models	Matthew Allen, Ph.D., Indiana University School of Medicine (USA)	Basic
Muscle-Bone Interactions – More Than Physical!	Marco Brotto, BSN, MS, Ph.D., University of Missouri-Kansas City (USA)	Basic
Mechanotransduction	X. Edward Guo, Ph.D., Columbia University (USA)	Basic
Cortical Remodeling with Age	Robert Jilka, Ph.D., University of Arkansas (USA)	Basic
Osteoporosis in Men	Peter Ebeling, M.D., FRACP, The University of Melbourne (Australia) Supported by an educational grant from Merck & Co., Inc.	Clinical
How Long Should We Treat Osteoporosis?	Dennis Black, Ph.D., University of California, San Francisco (USA)	Clinical
Hypoparathyroidism	Aliya Khan, M.D., FRCPC, FACP, FACE, McMaster University (Canada) and Rajesh Thakker, M.D., FRCP, University of Oxford (United Kingdom)	Clinical
Stem Cells and Regenerative Medicine	Pamela Robey, Ph.D., National Institute of Dental and Craniofacial Research (USA)	Translational
Bisphosphonates and Longevity	Kenneth Lyles, M.D., Duke University Medical Center (USA) and R. Graham Russell, M.D., Ph.D., University of Oxford (United Kingdom)	Translational

Continued from page 13

Monday, October 7, 11:00 am – 12:00 pm

торіс	SPEAKER	ТҮРЕ
Redox Balance in Bone Metabolism	Stavros Manolagas, M.D., Ph.D., University of Arkansas (USA)	Basic
Sclerostin/RANKL Interactions in Osteocytes	Gerald Atkins, Ph.D., University of Adelaide (Australia)	Basic
Wnt Signaling	Bart Williams, Ph.D., Van Andel Research Institute (USA)	Basic
Physical Activity and Fracture Risk	Harri Sievanen, Sc.D., UKK Institute for Health Promotion Research (Finland)	Clinical
Hip Structure by QCT	Thomas Lang, Ph.D., University of California, San Francisco (USA)	Clinical
Genetic Basis for Osteoporosis	Emma Duncan, M.D., Ph.D., Royal Brisbane and Women's Hospital (Australia) Supported by an educational grant from Merck & Co., Inc.	Clinical
Fat and Bone	Mark Horowitz, Ph.D., Yale University School of Medicine (USA)	Translational
X-linked Hypophosphatemia	Marc McKee, Ph.D., McGill University (Canada) and Thomas Carpenter, M.D., Yale University School of Medicine (USA)	Translational
Fibrous Dysplasia, Bench to Bedside	Roland Chapurlat, M.D., Ph.D., E. Herriot Hospital (France) and Paolo Bianco, M.D., Universita La Sapienza (Italy)	Translational

Special Sessions

Friday, October 4

Meeting Overview for Health Professionals

10:00 am - 11:30 am

This special session is designed for all health professionals, first-time meeting attendees, young investigators, individuals new to the field, nurses, clinical research study coordinators, physical therapists and/or those seeking guidance in navigating through the extensive ASBMR program.

Co-Chairs:

Betsy McClung, R.N., M.N., Oregon Osteoporosis Center (USA)

Joan Lappe, Ph.D., R.N., Creighton University (USA)

Basic Science Meeting Overview

Roland Baron, D.D.S., Ph.D., Harvard School of Medicine and of Dental Medicine (USA)

Clinical Science Meeting Overview

John Bilezikian, M.D., Columbia University College of Physicians and Surgeons (USA)

Grant Writing Session: Mock Study Section: Insights into Grant Reviewing Processes

10:00 am – 11:30 am

Sponsored by the ASBMR Membership Engagement and Education Committees

A panel of experts made up of U.S. and international researchers will offer insights into the reviewer's perspective of the grant application process. This session will give you a behind-the-scenes look into the review and scoring process for clinical and basic research grants, as well as training grants. This session is a can't-miss opportunity for researchers wanting to gain valuable insight into the grantreviewing process.

Co-Chairs:

Wenhan Chang, Ph.D., University of California, San Francisco (USA), Membership Engagement Committee Chair

Marian Hannan, DSc, MPH, Hebrew SeniorLife and Harvard Medical School (USA), Education Committee Chair

ASBMR/ECTS Clinical Debate – Treatments Developed for Fracture Prevention in Osteoporosis can be used in Patients with Chronic Kidney Disease

3:00 pm – 4:00 pm

Co-Chairs:

Sundeep Khosla, M.D., College of Medicine, Mayo Clinic (USA)

Neveen Hamdy, M.D., MRCP, Leiden University Medical Center (Netherlands)

Debaters:

For the motion Sophie Jamal, M.D., Ph.D., The University of Toronto (Canada)

Against the motion

Alastair McLellan, M.D., MBChB, Western Infirmary (United Kingdom)

Speed Networking Event

8:00 pm – 10:00 pm Sponsored by the Women in Bone and Mineral Research and Membership Engagement Committees

Supported by an educational grant from Lilly USA, LLC.

Registration Fee: \$35 (\$15 students/trainees)

The ASBMR Women in Bone and Mineral **Research and Membership Engagement** Committees are co-sponsoring this Speed Networking Event, providing you with a networking opportunity like no other. In 60 minutes you will have an opportunity to meet more than a dozen researchers and in four minutes learn about them and introduce yourself. Come prepared with a two-minute introduction that "sells" who you are and what you do. This is an opportunity to learn networking skills and meet members in all career stages. You will make key connections that are otherwise difficult to make in meetings as large as ASBMR. Come and join the fun and expand your network! A reception will follow the event.

Follow the excitement and opportunities...

Special Sessions

Continued from page 15

Saturday, October 5

Success in Research: Leadership Lessons from 2013 ASBMR Esteemed Awardees

10:30 am – 11:30 am

Sponsored by the Women in Bone and Mineral Research, Membership Engagement and Education Committees

In this session, designed for young investigators and individuals interested in career growth, ASBMR 2013 Esteemed Award recipients will provide insights into their research and career development, and offer leadership and career advice. Each recipient will briefly discuss their career path and research, highlighting the challenges they faced and the key leadership strategies they used to achieve success. Audience members will have the opportunity to ask questions. Don't miss this unique opportunity to hear directly from the leaders in the field.

Clinical Roundtable/Case Conference – Interpretation of Clinical Laboratory Testing

11:00 am – 12:00 pm

Chair:

Robert Adler, M.D., McGuire VA Medical Center (USA)

Vitamin D Testing

William Fraser, M.D., FRCP, University of East Anglia (United Kingdom)

Laboratory Testing for Secondary Osteoporosis

Marjorie Luckey, M.D., St. Barnabas Osteoporosis & Metabolic Bone Disease Center (USA)

Clinical Evening at ASBMR - Do Our Treatments for Osteoporosis Harm Our Patients?

Supported by an educational grant from Lilly USA, LLC and Warner Chilcott Company, LLC.

Space is limited and available on a first-come, first-served basis. Attendees must be registered for the ASBMR 2013 Annual Meeting.

6:30 pm – 8:30 pm

Co-Chairs:

Bo Abrahamsen, M.D., Ph.D., Copenhagen University Hospital Gentofte (Denmark)

Markus Seibel, M.D., Ph.D., Bone Research Program, ANZAC Research Institute, The University of Sydney (Australia)

Calcitonin and Cancer

Suzanne Jan De Beur, M.D., Johns Hopkins University (USA)

Calcium and Myocardial Infarction

Ian Reid, M.D., MBChB, University of Auckland (New Zealand)

Jane Cauley, Ph.D., University of Pittsburgh (USA)

Bisphosphonates and Atypical Fractures of the Femur

Thomas Einhorn, M.D., Boston Medical Center (USA)

Basic Distinguished Oral Presentations and Networking Reception

Supported by an educational grant from Merck & Co., Inc.

Space is limited and available on a first-come, first-served basis. Attendees must be registered for the ASBMR 2013 Annual Meeting.

6:30 pm – 7:00 pm Networking Reception

7:00 pm – 8:30 pm Scientific Presentations

The ASBMR Program Committee has designed this special session for scientists to hear the most exciting abstracts submitted to the Annual Meeting. Plan to arrive early for the Networking Reception as space is limited and available on a first-come, first-served basis. Food and drinks will be provided.

Follow the excitement and opportunities...

Special Sessions

Continued from page 16

Sunday, October 6

Funding Opportunities in a Changing NIH Landscape

10:30 am – 11:30 am

This will be an open forum for discussion with NIH directors and program officers regarding new, future and/or underutilized opportunities for supporting science in bone and mineral research. Institutes with interest in bone and mineral research will present brief bulleted overviews followed by questions from the audience either written in advance or taken from the floor during this interactive session.

Monday, October 7

Career Development: Collaboration 101

10:30 am – 11:30 am

Sponsored by the ASBMR Membership Engagement and Women in Bone and Mineral Research Committees

Collaborations, while challenging, can lead to outstanding scientific discoveries, increased funding opportunities and career growth. In Collaboration 101, learn how to make your collaborations successful. This session will focus on establishing collaborations, developing relationships with non-academic bodies, and international collaborations. Attendees will engage in interactive discussion following the panel. This session is a must-attend event for investigators at all career stages and will provide practical, useful advice for establishing and maintaining successful scientific collaborations.

Co-Chairs:

Teresita Bellido, Ph.D., Indiana University School of Medicine (USA), Women in Bone and Mineral Research Committee Chair

Wenhan Chang, Ph.D., University of California, San Francisco (USA), Membership Engagement Committee Chair

Clinical Roundtable/Case Conference -Treating Osteoporosis Associated with Chronic Kidney Disease

11:00 am – 12:00 pm

Chair:

Roland Chapurlat, M.D., Ph.D., E. Herriot Hospital (France)

Diagnosis/Assessment

Keith Hruska, M.D., Washington University in St. Louis School of Medicine (USA)

Management and Treatment

Paul Miller, M.D., FACP, Colorado Center for Bone Research (USA)

Speakers:

John Adams, M.D., University of California, Los Angeles (USA)

Natalie Sims, Ph.D., St. Vincent's Institute for Medical Research (Australia)

Larry Suva, Ph.D., University of Arkansas (USA)

Panelists:

Stuart Ralston, MBChB, M.D., University of Edinburgh (UK)

Ivo Kalajzic, M.D., Ph.D., University of Connecticut Health Center (USA)

Melissa Kacena, Ph.D., Indiana University School of Medicine (USA)

Clinical Roundtable/Case Conference - Monitoring Treatment Response in Osteoporosis Medication 11:00 am – 12:00 pm

Chair:

Kristine Ensrud, M.D., MPH, Minneapolis VA Medical Center / University of Minnesota (USA)

Bone Markers

Nicola Peel, D.M., FRCP, Sheffield Teaching Hospitals (United Kingdom)

Bone Density

Nelson Watts, M.D., Mercy Health Osteoporosis and Bone Health Services (USA) Follow the excitement and opportunities...

Annual Meeting Resource Materials

Abstracts Book

The 2013 Abstracts book is published as a supplement of the *Journal of Bone and Mineral Research (JBMR)*[®]. A limited number of the 2013 Abstracts books will be printed and available for purchase and pick-up on site in Baltimore. To obtain a copy, you must order it in advance through the registration form by Wednesday, August 21. The price of the book is \$25 USD. The 2013 Abstracts book will also be available in PDF format for download in advance of the meeting at no charge to members and meeting attendees.

Abstracts Online Program

Only members and pre-registered Annual Meeting attendees will be able to access the 2013 Abstracts Online Program before the Annual Meeting. This tool can be used to help you search for and review abstract presentations, as well as plan your meeting itinerary. You may access this convenient program via the ASBMR website at www.asbmr2013.org starting in mid-September.

Meet-the-Professor Handout Booklet

The Meet-the-Professor Handout Booklet contains all the handouts supplied by the professors in one convenient booklet. The booklet can be purchased in advance through the registration form for \$10 USD to be picked up on site. Handout booklets will also be available in PDF format for download in advance of the meeting at no charge to members and meeting attendees.

On-Site Program Book

Supported by an educational grant from Lilly USA, LLC.

As a registered meeting attendee you will receive an On-Site Program book along with other meeting materials once you arrive at the Convention Center and check in at the registration counter. This book contains a detailed schedule and description of the events for the entire meeting, including the Ancillary Program.

ASBMR Mobile App

This free smartphone application is a mobile version of the on-site program book and includes the meeting abstracts. The app also features general meeting information, exhibitor listings and detailed maps of the convention center. The app will be available to download in mid-September.

Ancillary Meetings

If you are looking to connect with colleagues on a special topic or reconnect with former classmates for a mini reunion, we have a process that can help you. Applications need to be submitted on or before August 14, 2013 and space is limited. For more information, visit www.asbmr.org/ancillary-program.

Networking & Social Opportunities

Friday, October 4

Welcome Reception and Plenary Poster Session

5:45 pm – 7:00 pm

Attendees and registered guests are invited to meet and mingle during our Wine and Cheese Welcome Reception and Plenary Poster Session in the ASBMR Discovery Hall. Simply display your badge for admission. Guests may purchase a badge for \$40 in advance or \$50 on site for entrance to the Welcome Reception and all Discovery Hall events.

Young Investigator/First-Time Attendee/Minority Investigator Reception

5:45 pm – 7:00 pm

Sponsored by the ASBMR Membership Engagement Committee, Young Investigator Subcommittee and Minority Subcommittee

The ASBMR Membership Engagement Committee, Young Investigator Subcommittee and Minority Subcommittee members will be in attendance for this meet-and-greet networking event. This reception has been organized to promote interactions among young investigators, minority investigators and ASBMR leadership so that they may begin building a network of career-long contacts. The reception will be held concurrently with the Welcome Reception and the Plenary Poster Session in the Young Investigator Lounge in the ASBMR Networking Center in the Discovery Hall.

Young Investigator and Minority Investigator Networking Hour

7:15 pm – 8:00 pm

Sponsored by the ASBMR Membership Engagement Committee, Young Investigator Subcommittee and Minority Subcommittee

Young investigators and under-represented minority investigators who wish to continue building connections with peers in a fun and informal setting are invited to attend this event, which will precede the speed networking event. Sign up to attend when you register for the meeting.

Speed Networking Event

8:00 pm - 10:00 pm

Sponsored by the Women in Bone and Mineral Research and Membership Engagement Committees

Supported by an educational grant from Lilly USA, LLC.

Registration fee: \$35 (\$15 students/trainees)

This Speed Networking Event provides you with a networking opportunity like no other. In 60 minutes you will have an opportunity to meet more than a dozen researchers and in four minutes learn about them and introduce yourself. Come prepared with a two-minute introduction that "sells" who you are and what you do. This is an opportunity to learn networking skills and meet members in all career stages. You will develop connections that can be otherwise difficult to make in meetings as large as ASBMR. A reception will follow the event.

Contents

Networking & Social Opportunities

Continued from page 19

Saturday, October 5

ASBMR Networking Breakfast

6:45 am – 8:00 am Sponsored by the ASBMR Membership Engagement Committee

New Investigators (early-career stage), new ASBMR members and young and underrepresented minority investigators are invited to join ASBMR leadership, senior investigators and NIH representatives for an informal networking breakfast. New Investigators and first-time attendees will have the opportunity to network with senior investigators at tables assigned by research topic. Breakfast will be provided.

ASBMR Bone Bash - a Premier Networking Event!

Supported in part by an educational grant from Lilly USA, LLC.

8:30 pm – 11:30 pm

Network with colleagues from across the globe while enjoying music and delicious desserts at the Maryland Science Center. The museum is within walking distance of all of our hotels and is near great restaurants on the Inner Harbor, so we encourage attendees to go out for dinner before joining us. Along with an energetic band to get attendees moving on the dance floor, we'll have the museum exhibits open and accessible to everyone. Tickets cost \$30 and can be purchased through registration.



Sunday, October 6

ASBMR Town Hall Meeting

6:00 pm – 7:00 pm

You are invited to attend the ASBMR Town Hall Meeting where you will learn about the Society, including the year in review, planned activities, strategic directions and leadership opportunities. The ASBMR Town Hall Meeting will be held at the Baltimore Convention Center. Come learn more about ASBMR, meet with ASBMR leadership, and ask questions during an "open-mic" time.

Networking & Social Opportunities

Continued from page 20

Ongoing Opportunities

ASBMR Networking Center and Knowledge X-Change

Located in the ASBMR Discovery Hall, the ASBMR Networking Center is a central spot to meet-up with old colleagues and to discover new collaborators and friends. It's also a great place to meet our friendly ASBMR staff, to hold discussions with NIH representatives and enjoy free WiFi for online networking. The Knowledge X-Change inside the Networking Center will host informal discussions with speakers and other leaders in the field.

Meet-the-Professor Sessions

The Meet-the-Professor Sessions are informal sessions designed to provide an opportunity to interact with experts in an intimate setting and discuss specific clinical and research topics. The sessions will be held Friday through Monday. Please be sure to purchase a Meet-the-Professor Handout Booklet that contains all the handouts supplied by the professors. The booklet can be purchased when you register for \$10 USD and picked up on site. Handout booklets will also be available in PDF format for download in advance of the meeting at no charge to members and meeting attendees.

NIH Lounge

Representatives from the U.S. National Institutes of Health (NIH) and the Center for Scientific Review (CSR) will be available in the NIH Lounge in the ASBMR Networking Center to discuss grant proposals and ideas. Program staff from the following institutes and centers will be available to talk with you:

- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
- National Cancer Institute (NCI)
- National Institute of Dental and Craniofacial Research (NIDCR)

- National Institute on Aging (NIA)
- National Institute of Child Health and Human Development (NICHD)
- Center for Scientific Review (CSR)

Poster Tours

Sponsored by the ASBMR Education Committee Back by popular demand, the Annual Meeting Poster Session Tours will take place during each of the three poster sessions on Saturday, October 5, Sunday, October 6, and Monday, October 7. These poster tours will be guided by a prominent scientist in the bone field to assist attendees in navigating the science within the poster hall. Participants will be able to choose between tours focused on either basic or clinical

science. The tours will begin at the ASBMR Networking Center located in Discovery Hall and will last approximately 60 minutes. Please visit the ASBMR website in mid-September to sign up to attend one of these exciting poster tours.

Working Groups

Working Groups are small interactive evening sessions organized around focused topics of special interest to you and others in your specific area of study. They are part of the ASBMR Ancillary Program and are organized by members independent of the official ASBMR program. Additional tickets are required. See page 25 for topics and speakers.

Young Investigator Lounge

All young investigator attendees are invited to visit the Young Investigator Lounge located in the ASBMR Networking Center in the Discovery Hall. Don't miss this opportunity to make new friends and expand your network of colleagues.

Follow the excitement and opportunities...

The ASBMR Discovery Hall What's New. What's Next.

Travel beyond the traditional exhibit hall and enter the ASBMR Discovery Hall. ASBMR creates a truly immersive experience, all in one central location.

- New science New knowledge New challenges New tools
 - New products and services New colleagues and contacts

New Science

With approximately 1500 poster presentations, ASBMR presents the newest insights in bone science right before your eyes. Sixty-minute "Poster Tours," guided by prominent scientists in the bone field, assist you in navigating the poster presentations. Specific schedule information and instructions on how to sign up will be available in September. Please visit the ASBMR website for ongoing updates.

New Knowledge

The popular ASBMR Knowledge X-Change is an interactive forum for participating in small-group discussions on hot topics with leading experts in the bone field. Similar to the Genius Bar at your local Apple Store, the ASBMR Knowledge X-Change provides you with the help desk and give-and-take dialogue on research issues and techniques necessary for advancement.

New Challenges

NEW in 2013, the ASBMR is pleased to present the first ever ASBMR Discovery Hall Quiz Show. Watch Young Investigators face-off to answer brain busting questions about bone and mineral science.

New Tools

Nowhere else in the bone science field will you find a display of innovation quite like this. The ASBMR Laboratory Showcase X-Change will give you a glimpse of what's new and what's next in creating the optimum research laboratory.

New Products and Services

So much to see, so little time? We hear that. ASBMR makes it easier to see what's new, marking booths featuring new content with an NP logo in the program book, onsite signage and at the actual booth.

Additionally, as you learn about the latest products and services offered by our exhibitors, get your raffle card signed for a daily chance to win an iPad!

New Colleagues and Contacts

While exhibits and presentations can be stimulating, conversations with colleagues are what brings it all to life. The ASBMR Networking Center is your hot-spot for meeting likeminded contacts and new resources in the field who can assist in your professional and scientific endeavors.

Explore it all in the ASBMR Discovery Hall



Contents

ASBMR SYMPOSIUM: Cutting Edge Discoveries in Muscle Biology, Disease and Therapeutics

Thursday, October 3, 2013 | 8:00 am – 5:00 pm Baltimore Convention Center | Baltimore, Maryland, USA

Supported in part by an educational grant from Lilly USA, LLC.

NEW THIS YEAR is the **ASBMR Symposium: Cutting Edge Discoveries in Muscle Biology**, **Disease and Therapeutics** that will be held one day prior to the ASBMR 2013 Annual Meeting. This special one-day symposium has been organized in an effort to advance the understanding of muscle and bone interactions in order to discover treatments and means to prevent both sarcopenia and osteoporosis.

8:00 am – 9:00 am Continental Breakfast

9:00 am – 10:15 am

The Cells of Muscle

Co-Chairs: Dawn Cornelison, Ph.D., University of Missouri (USA) and Elizabeth Chen, Ph.D., Johns Hopkins University (USA)

Satellite Cells – Andrew Brack, Ph.D., Center for Regenerative Medicine, Massachusetts General Hospital (USA)

The Cellular Basis of Heterotopic Ossification – David Goldhamer, Ph.D., University of Connecticut (USA)

Fibrosis Source of Cells, TGF-beta signaling and Muscle Injury – *Gabrielle Kardon, Ph.D., University of Utah (USA)*

10:15 am – 11:00 am Break and Poster Viewing

11:00 am – 12:15 pm

Function Beyond Contraction

Co-Chairs: Karyn Esser, Ph.D., University of Kentucky (USA) and Susan Bloomfield, Ph.D., FACSM, Texas A&M University (USA)

Circadian Rhythms, Clock Genes and Muscle – Karyn Esser, Ph.D., University of Kentucky (USA)

Mitochondrial Bioenergetics and Metabolic Disease – Darrell Neufer, Ph.D., East Carolina University (USA)

Mitochondria, Aging and Sarcopenia – Rafael de Cabo, Ph.D., National Institute on Aging (USA)

12:15 pm – 1:30 pm Lunch and Poster Viewing

1:30 pm – 2:45 pm

Clinical Application of Muscle Wasting and Disease Co-Chairs: Catherine Amara, Ph.D., University of Toronto (Canada) and Kevin Conley, Ph.D, University of Washington (USA)

Human Aging and Muscle Metabolism – Kevin Conley, Ph.D, University of Washington (USA) Relationship between Muscle Wasting and Chronic Kidney Disease – Jonathan Himmelfarb, M.D., University of Washington (USA)

Imaging – Bruce Damon, Ph.D., Vanderbilt University Institute of Imaging Science (USA)

2:45 pm – 3:15 pm Break and Poster Viewing

3:15 pm – 4:45 pm

Therapeutics

Co-Chairs: Tamara B. Harris, M.D., National Institute on Aging (USA) and Douglas Kiel, M.D., M.P.H., Institute for Aging Research, Hebrew SeniorLife (USA) Pre-clinical translation-NFkB – Denis Guttridge, Ph.D., Ohio State University (USA)

Myostatin – Se-Jin Lee, M.D., Ph.D., Johns Hopkins University School of Medicine (USA)

Therapeutic Targets for Muscle Wasting - Ronenn Roubenoff, M.D., Novartis Institutes for Biomedical Research and Tufts University (USA)

Developing New Medicines to Treat Muscle Wasting, Frailty and Sarcopenia – William Evans, Ph.D., GlaxoSmithKline (USA)

4:45 pm – 5:00 pm Closing Remarks

Contents

ASBMR SYMPOSIUM: Cutting Edge Discoveries in Muscle Biology, Disease and Therapeutics

Thursday, October 3, 2013 | 8:00 am – 5:00 pm Baltimore Convention Center | Baltimore, Maryland, USA

Muscle Symposium Registration Fees

		BEST VALUE Combine Muscle Symposium (Oct 3) with Annual Meeting (Oct 4-7)	
	1-Day Muscle Symposium	On or before August 8	On or after August 9
ASBMR Member	\$275	\$440	\$565
Nonmember*	\$275	\$750	\$875
Student/Resident/ Fellow Member	\$100	\$255	\$305
Student/Resident/ Fellow Nonmember**	\$100	\$345	\$395
Allied Health Professional***	\$100	\$345	\$395

*If you are a non-member muscle scientist, please contact the ASBMR Business Office (asbmr@asbmr.org or +1 (202) 367-1161) for a special registration source code.

** Graduate and medical students and those holding M.D. or Ph.D. degrees in residency or post-graduate fellowship programs may obtain the reduced fee by having their mentor sign the Registration Form, verifying their training status.

*** Allied Health Professionals are defined as professionals who participate and help physicians in delivering health care and professionals who contribute to the scientific efforts of researchers. Allied Health Professionals may obtain the reduced registration fee by having their director sign the Registration Form verifying their status.

Refunds/Substitutions

Refunds for conference registration will be made if cancellation is received in writing by August 8, 2013. The items listed in the "Extra Events and Resources" section on page 34, as well as working groups, are non-refundable at any time. Only current members at the time of registration are eligible for discounted member registration rates. ASBMR does not refund the difference in registration fees paid by individuals who register as non-members and later apply/are accepted as members. All refunds will be processed after the Annual Meeting and will be assessed a \$100 administrative fee.

There is no charge for substitutions. Eligibility requirements for Member or Student rates will apply. Late registration rates may apply to substitutions made after August 8, 2013. Once a badge is printed, changes can only be made on site. Badge sharing is not allowed.

International Society

for Clinical Densitometry		Working Groups		
Wednesday, October 2	Thursday, October 3	Friday, October 4	Sunday, October 6	
7:15 am – 8:00 am On-site Registration and Sign-in* 8:00 am – 6:00 pm Bone Densitometry Course for Clinicians	7:15 am – 8:00 am Sign-in* 8:00 am – 2:00 pm Bone Densitometry Course for Clinicians and Technologists	7:15 pm – 9:45 pm Nutrition Working Group 7:15 pm – 9:30 pm Rare Bone Disease Working Group	7:15 pm – 9:45 pm Adult Bone and Mineral Working Group 7:15 pm – 9:30 pm Bone Strength Working Group	
and Technologists *ISCD Courses require separate fees and registration	*ISCD Courses require separate fees and registration	7:30 pm – 9:30 pm Bone Turnover Markers Working Group	7:15 pm – 9:30 pm Pediatrics Bone and Mineral Working Group	
	8:00 am – 12:00 pm 2013 Pediatric Development Conference (PDC)	7:30 pm – 9:30 pm Muscle and Bone Working Group 7:30 pm – 9:30 pm Working Group on Skeletal Aging	7:30 pm – 9:15 pm Working Group on Musculoskeletal Rehabilitation in Patients with Osteoporosis	
			7:30 pm – 10:00 pm Imaging and Skeletal Macro-architechture Working Group	

Follow the excitement and opportunities...

ASBMR Expectations of Authors and Presenters

The 2013 Ancillary Program is not part of the ASBMR Official Scientific Program. However, ASBMR expects that all authors and presenters affiliated with the ASBMR 2013 Annual Meeting and the 2013 Ancillary Program will provide informative and fully accurate content that reflects the highest level of scientific rigor and integrity. This includes the presentations at the 2013 Ancillary Meetings - the International Society for Clinical Densitometry (ISCD) Courses and Working Groups.

ASBMR depends upon the honesty of the authors and presenters and relies on their assertions that they have had sufficient full access to the data and are convinced of its reliability. Please review further expectations regarding speaker disclosures and presentation guidelines.

Working Groups

Working Groups are interactive meetings related to a focused topic not specifically addressed in the ASBMR Official Program. These meetings are organized by ASBMR members and not initiated by industry. Please note that Working Groups are not part of the ASBMR Official Program and have been organized by the parties indicated, so there are separate ticket fees.

Working Group Registration Procedures

Tickets for all Working Groups are available on a first-come, first-served basis through preregistration and during on-site registration hours, space permitting. We strongly encourage you to pre-register online. Waiting lists are not maintained for Working Groups that have met their attendance limit.

Working Groups

Continued from page 25

Friday, October 4

Nutrition Working Group

7:15 pm – 9:45 pm

Registration Fee: \$30

Supported by an educational grant from Dairy Research Institute

Why Does Dietary Protein Influence Skeletal Health?

Traditionally, dietary protein has been associated with urinary calcium loss through acid-base metabolism. Acid-base effects on bone are supported by a new trial with potassium, an alkaline salt. However, other evidence shows benefits of protein to bone, possibly through IGF-I. Newer evidence suggests a role for tight junction proteins.

For further information, please contact:

Connie M. Weaver, Ph.D. Purdue University, Nutrition Science Tel: +1 (765) 494-8237 Email: weavercm@purdue.edu

Rare Bone Disease Working Group 7:15 pm – 9:30 pm

Registration fee: \$35

This working group program will provide an up-to-date review of the etiology, pathogenesis, diagnosis and management of four highly interesting and informative (but rarely discussed) disorders. Experts will discuss ways to accelerate research in the area of rare bone disease through collaboration with scientists and other key stakeholders. There will be ample time for questions and discussion and dinner will be served.

For further information please contact:

Tracy Hart Rare Bone Disease Patient Network Tel: +1 (301) 947-0083 Email: <u>thart@oif.org</u>

Bone Turnover Markers Working Group 7:30 pm – 9:30 pm

Registration Fee: \$30

Supported by unrestricted educational grants Update on Efforts to Improve the Clinical Utility of Bone Turnover Markers

This meeting will address the clinical use of bone turnover markers and recent efforts to address perceived limitations. Representatives from the National Bone Health Alliance (NBHA), International Osteoporosis Foundations-International Federation of Clinical Chemistry (IOF-IFCC) and Bone Turnover Working Groups will summarize their efforts to address bone turnover reproducibility, assay standardization and normative data. Two experts will debate the utility of bone turnover markers to assist clinicians manage long-term anti-fracture therapy. Questions to be addressed include: Which bone turnover markers are recommended for clinical use and why? For a given marker, do different assays provide that same results? Which normative data should be used to establish the reference range for each marker? Can bone markers help clinicians manage longterm use of anti-fracture treatments?

A light dinner will precede the program.

For further information, please contact: Douglas C. Bauer, M.D. University of California-San Francisco Email: dbauer@psg.ucsf.edu

Muscle and Bone Working Group

7:30 pm – 9:30 pm Ninth Annual Meeting

Registration Fee: \$30

The Muscle Strength-Bone Strength Relationship in the Young and Old.

The largest forces on skeletons come from muscles contractions. This suggests that changes in muscle strength should cause changes in bone strength. This idea has been tested and observed in several studies of growing children, immobilized individuals and the elderly. There will

Follow the excitement and opportunities...

Working Groups

Friday continued

be five 20-minute expert talks about specific aspects of the muscle-bone interaction in these varied populations. A box dinner will precede the program.

For further information, please contact:

Christopher L. Gordon, Ph.D. McMaster University, Department of Radiology Tel: +1 (905) 628-5677 Email: <u>chrisgordon@sympatico.ca</u>

Working Group on Skeletal Aging 7:30 pm – 9:30 pm

Registration fee: \$40

Cellular Senescence and the Aging Skeleton This program will consist of three short talks and a panel/audience discussion on cell senescence as a mechanism for skeletal aging. Topics will

Sunday, October 6

Adult Bone and Mineral Working Group

7:15 pm – 9:45 pm

Registration fee: \$40

The ABMWG is one of the oldest working groups of the ASBMR Annual Meeting. The ABMWG meeting presents an historical vignette, and is followed by a didactic forum in which several peer-reviewed oral abstracts dedicated to clinical metabolic bone and mineral disorders are presented and scrutinized by rigorous attendee dialogue. ABMWG attendees/ discussants are internationally revered clinical bone scientists, clinical bone educators and trainees in diseases related to bone and mineral metabolism. The ABMWG also bestows the coveted Boy Frame Award for "Excellence in Clinical Research" at its annual meeting.

A buffet dinner will precede the program.

For further information, please contact: Daniel L. Hurley, M.D.

Mayo Clinic Email: <u>hurley.daniel@mayo.edu</u> include an overview of cell senescence and its physiological implications (James Kirkland, Mayo Clinic, USA), the roles of cell senescence in aging bone (Pierre Marie, INSERM and University Paris Diderot, France), and senescence-based animal models for the study of age-related bone loss (Johannes P. Van Leeuwen, Erasmus University Medical Center, Netherlands). A panel discussion and audience participation will be led by Clifford Rosen (Maine Medical Center Research Institute and Tufts University School of Medicine, USA). A dinner will precede the program.

For further information, please contact:

Robert J. Pignolo, M.D., Ph.D. University of Pennsylvania Tel: +1 (215) 573-1514 or +1 (215) 898-8653 Email: pignolo@mail.med.upenn.edu

Bone Strength Working Group 7:15 pm – 9:30 pm

Registration fee: \$30

This program will be co-chaired by David Kendler, M.D. (University of British Columbia) and Louis-George St. Marie, M.D. (University of Montreal). The program will begin with a welcome and introduction from Angela Cheung, M.D., Ph.D. (University of Toronto) followed by presentations of top abstracts that the working group will select from the ASBMR Poster Program. The abstract presentations will be followed by a keynote debate entitled "We should adopt a 'Treat to Target' paradigm to optimize bone strength". Dr. Steven Cummings will be debating "for" the argument and Dr. Eugene McCloskey will be debating "against." After the debate there will be time set aside for questions and discussion/final vote. The working group will end with concluding remarks from Dr. Richard Kremer, M.D., Ph.D. (McGill University).

A plated dinner will precede the program.

Follow the excitement

and opportunities...

Working Groups

Sunday continued

For further information, please contact:

Richard Kremer, M.D., Ph.D. McGill University Health Center Telephone: +1 (514) 843-1632 Email: <u>richard.kremer@mcgill.ca</u>

OR

Angela Cheung, M.D., Ph.D. University of Toronto Telephone: +1 (416) 340-4301 Email: angela.cheung@uhn.on.ca

Pediatric Bone and Mineral Working Group

7:15 pm - 9:30 pm

Registration fee: \$35 *Supported by an educational grant from Alexion*

The Pediatric Bone and Mineral Working group meets each year at the ASBMR annual meeting to hear scientific presentations and engage in discussions regarding new discoveries in pediatric bone and mineral diseases, healthy skeletal development, and advances in diagnostic and treatment modalities. This year, in addition to our key speaker we are also accepting abstracts for presentations in this forum.

For further information please contact:

Erik A. Imel, M.D. Indiana University School of Medicine Tel: +1 (317) 274-1339 Email: eimel@iupui.edu

Imaging and Skeletal Macroarchitecture Working Group

7:30 pm – 10:00 pm

Registration fee: \$25

Supported by the Department of Radiology and Biomedical Imaging, UC San Francisco and the Cambridge NIHR Biomedical Research Centre

QCT imaging and proximal femoral structure

The discipline of computational anatomy was created by MRI neuroimaging scientists to distinguish disease-related alterations of brain structure from the large variations in normal scans. Recently, skeletal imaging groups have applied computational anatomy techniques to QCT scans of the proximal femur. In this research, a combination of image registration and voxel based statistical analyses is used to study in detail the structure of the proximal femur in relation to aging, fracture and drug treatment. The goal of this workshop is to provide an overview of this newly emerging field and how it can be applied to extend our understanding of osteoporosis and other musculoskeletal conditions. The workshop will consist of a short introduction, followed by three 20-minute technical presentations, and concluding with a discussion and Q&A panel conducted by three leading clinical researchers who have employed this approach in epidemiologic studies of osteoporosis.

For further information, please contact: Thomas F. Lang, Ph.D. Tel: +1 (415) 353-4552 Email: <u>Thomas.Lang@ucsf.edu</u>

Working Group on Musculoskeletal Rehabilitation in Patients with Osteoporosis

7:30 pm – 9:15 pm

15th Annual Meeting Registration Fee: \$25

The program will be selected by core members of our working group from submitted abstracts to the ASBMR official program using the following key words: Exercise (bone, joint, muscle), nutrition, orthopaedics (mechanical loading), treatments (non-pharmacological treatment) and hip fracture rehabilitation. In addition, special lectures highlighting new developments in our field will be given.

For further information, please contact:

Mehrsheed Sinaki, M.D. Mayo Clinic and Mayo Clinic College of Medicine Tel: (507) 284-2608 Email: <u>sinaki.mehrsheed@mayo.edu</u>

OR

Michael Pfeifer, M.D. Institute of Clinical Osteology Tel: +49-5281-151414 Email: mdrpfeifer@aol.com

Contents

The International Society for Clinical Densitometry (ISCD)

Please note that the International Society for Clinical Densitometry (ISCD) courses are not part of the ASBMR Official Scientific Program and have been organized by ISCD. The ISCD sessions are held in conjunction with the ASBMR Annual Meeting and require a separate registration and fee. To register for this course, or for additional information regarding The International Society for Clinical Densitometry, visit <u>www.iscd.org</u> or call +1 (860) 259-1000.

The core elements of the ISCD Bone Densitometry Course provide a set of standard practices and information to raise the level of awareness and education in bone densitometry. The course emphasizes central DXA testing. In addition, a solid foundation in other forms of bone mass measurement, including peripheral DXA and QCT is provided.

The ISCD Bone Densitometry Course will take place on Wednesday and Thursday, October 2-3:

Clinician Track (open to M.D.s, Ph.D.s, D.O.s, Nurse Practitioners and Physician Assistants) is most appropriate for those involved in the interpretation of DXA scans.

Technologist Track (open to Technologists and Allied Health Professionals) is most appropriate for those involved in the performance of the bone densitometry examination.

Technologists may attend the clinician track if gaining information about interpreting DXA scans would assist them with their job responsibilities. However, it is recommended that the technologist track be taken first.

Accreditation Statement

The International Society for Clinical Densitometry is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to offer continuing medical education for physicians.

2013 Pediatric Development Conference

The primary aim of the Pediatric PDC is to develop recommendations that inform pediatric clinicians as to which children are at risk for bone loss, what assessment tools are most effective in the evaluation of bone health, how to interpret bone density results, and what management strategies are available to optimize bone density and prevent the devastating complications associated with osteoporosis.

The last ISCD pediatric position development conference, which assembled pediatric bone health experts from all over the world, was held in 2007. Significant scientific advancement over the past five years demands the review of the current positions and necessitates the reconvening of experts to develop new evidence-based guidelines.

The International Society for Clinical Densitometry (ISCD) is partnering with the American Society for Bone and Mineral Research (ASBMR) to offer this Pediatric Position Development Conference on Thursday, October 3, 2013 prior to the ASBMR 2013 Annual Meeting.

Topics to be addressed:

Task Force 1: Technologies that Assess Bone Density of the Peripheral Skeleton, Chair: Judith Adams, MB BCh MRCGP, University of Manchester, (UK)

Task Force 2: Chronic Disease, Chair: Maria-Luisa Bianchi, MD, Instituto Auxologico Italiano (Italy)

Task Force 3: Fractures and Osteoporosis, Chair: Nicholas Bishop, MD, FRCPCH, Univ. Sheffield (UK)

Task Force 4: Reporting of Pediatric Densitometry Results, Chair: Nicola Crabtree, PhD, MSc, Queen Elizabeth Hospital, Birmingham (UK)

Task Force 5: Infants, Chair: Heidi Kalkwarf, PhD, Cincinnati Children's Hospital Medical Center (USA)

Schedule:

Thursday, October 3, 2013

8:00 am – 12:00 noon Open Meeting

Public presentation of the findings and recommendations of the various task forces to an Expert Panel (comprised of eight members and two moderators selected by ASBMR and ISCD.) this session offers the opportunity for comment by the public in attendance.

1:00 pm – 5:00 pm Closed Meeting of the Expert Panel

Expert Panel will formally vote on the findings and recommendations of the various task forces and then fine tune the wording of the statements that will become the recommended official ISCD/ASBMR positions.

Steering Committee Members:

Chairs: Catherine Gordon, M.D., MSc, Brown University (USA)

Mary Leonard M.D., MSCE, University Pennsylvania (USA)

Babette Zemel, Ph.D., University Pennsylvania (USA)

Registration:

There is no cost to attend this conference. For space planning purposes, we do ask that you register through the ISCD, by <u>clicking here</u>.

Contents

General Information

Contents

Target Audience

The ASBMR 2013 Official Scientific Program is designed for researchers, physicians and other health and allied health professionals with interests in:

- Biomechanics
- Cell Biology
- Dentistry
- Endocrinology
- Epidemiology
- Genetics
- Internal Medicine
- Metabolism and Musculoskeletal Research
- Molecular Biology
- Molecular Genetics
- Nephrology
- Orthopaedics
- Pathology
- Pharmacology
- Physiology
- Rheumatology

Meeting Objectives

Upon returning home from the meeting, participants should be able to:

- Discuss the most current and significant advances in biomedical and clinical research in bone and mineral metabolism, specifically in the areas of cancer and bone, personalized medicine, chronic kidney disease, osteoporosis, metabolic bone diseases and therapeutics.
- Better understand the interrelationship among basic research, clinical research and patient care.
- Improve their ability to treat and care for patients through an enhanced knowledge of osteoporosis, other diseases of bone, basic bone biology and its correlation to mineral metabolism.
- Develop new and enhanced strategies for the diagnosis and treatment of patients with disorders of bone and mineral metabolism.

Continuing Medical Education

This educational activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) 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.

AMA PRA Statement

IAHB designates this educational activity for a maximum of 32.25 AMA PRA Category 1 Credits[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.



General Information (continued)

Contents

Disclosure Policy

The American Society for Bone and Mineral Research is committed to ensuring the balance, independence, objectivity and scientific rigor of all its individually sponsored or industrysupported educational activities. Accordingly, the ASBMR adheres to the requirement set by ACCME that audiences at jointly sponsored educational programs be informed of a presenter's (speaker, faculty, author or planner) academic and professional affiliations, and the disclosure of the existence of any significant financial interest or other relationship a presenter or their spouse has with any proprietary entity over the past twelve months producing, marketing, re-selling or distributing health care goods or services, consumed by, or used on patients, with the exemption of non-profit or government organizations and non-health care related companies. When an unlabeled use of a commercial product, or an investigational use not yet approved for any purpose, is discussed during the presentation, it is required that presenters disclose that the product is not labeled for the use under discussion or that the product is still investigational. This policy allows the listener/attendee to be fully knowledgeable in evaluating the information being presented. The On-Site Program book will note those speakers who have disclosed relationships, including the nature of the relationship and the associated commercial entity.

Disclosure should include any relationship that may bias one's presentation or which, if known, could give the perception of bias. This includes relevant financial relationships of a spouse or partner. Disclosures will be printed in the program materials. These situations may include, but are not limited to: 1) Stock options or bond holdings in a for-profit corporation or self-directed pension plan; 2) Research grants; 3) Employment (full or part-time); 4) Ownership or partnership; 5) Consulting fees or other remuneration (payment); 6) Non-remunerative positions of influence such as officer, board member, trustee or public spokesperson; 7) Receipt of royalties; 8) Speaker's bureau; 9) Other.

ASBMR Expectations of Authors and Presenters

Through ASBMR meetings, the Society promotes excellence in bone and mineral research. To that end, ASBMR expects that all authors and presenters affiliated with the ASBMR 2013 Annual Meeting and the 2013 Ancillary Program will provide informative and fully accurate content that reflects the highest level of scientific rigor and integrity.

ASBMR depends upon the honesty of the authors and presenters and relies on their assertions that they have had sufficient full access to the data and are convinced of its reliability.

Furthermore, ASBMR expects that:

- Authors and presenters will disclose any conflicts of interest, real or perceived.
- Authors of an abstract describing a study funded by an organization with a proprietary or financial interest must affirm that they had full access to all the data in the study. By so doing, they accept complete responsibility for the integrity of the data and the accuracy of the data analysis.
- The content of abstracts, presentations, slides and reference materials must remain the ultimate responsibility of the author(s) or faculty.
- The planning, content and execution of abstracts, speaker presentations, slides, abstracts and reference materials should be free from corporate influence, bias or control.
- All authors and presenters (invited and abstracts-based oral and poster presenters) should give a balanced view of therapeutic options by providing several treatment options, whenever possible, and by always citing the best available evidence.

In addition, ASBMR's meeting evaluations will seek feedback regarding commercial bias at ASBMR Annual Meeting sessions, including the 2013 Ancillary Program.

2013 Supporters

ASBMR would like to thank our 2013 Supporters for their participation in the ASBMR Annual Meeting (As of 06/13/13)

Diamond Level

Lilly

Answers That Matter.

Platinum Level





The ASBMR scientific program is developed by the Society's Annual Meeting Program Committee prior to, and independent of, educational grant support. In accordance with the standards of ACCME and IAHB, the commercial supporters of this meeting have no influence regarding topics or speakers.

Follow the excitement and opportunities...

Registration Information

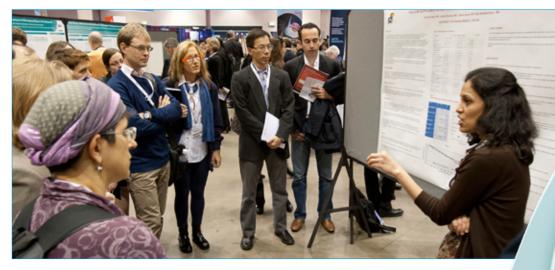
Registration discounts available through Thursday, August 8.

Registration Fees

	On or before August 8, 2013	On or after August 9, 2013
ASBMR Members	\$340	\$465
Non-Members	\$650	\$775
Resident, Student, Fellow – ASBMR Member	\$205	\$255
Resident, Student, Fellow – Non-Member*	\$295	\$345
Allied Health Professional**	\$295	\$345
Spouse/Guest	\$40	\$50
Extra Events and Resources		
Muscle Symposium (Thursday, Oct 3)	See pricing	on page 24
ASBMR Bone Bash – The Premier Networking Event (Saturday, Oct 5)	\$30	\$30
Speed Networking Event (Friday, Oct 4)	\$35 (\$15 students)	\$35 (\$15 students)
Meet-the-Professor Handout Booklet	\$10	\$10
2013 Abstracts Book – Print version (available for pick up on site)	\$25	\$25
Continuing Medical Education Credits	\$50	\$50
2012 Techniques in Bone and Muscle Biology DVD and Protocols Book	\$35	\$35

* Graduate and medical students and those holding M.D. or Ph.D. degrees in residency or post-graduate fellowship programs may obtain the reduced fee by having their mentor sign the Registration Form, verifying their training status.

** Allied Health Professionals are defined as professionals who participate and help physicians in delivering health care and professionals who contribute to the scientific efforts of researchers. Allied Health Professionals may obtain the reduced registration fee by having their director sign the Registration Form verifying their status.



ASBMR 2013 Annual Meeting / October 4-7, 2013

Registration Information

Contents

ASBMR Members Receive Valuable Savings



What's Included With Registration Fees?

Registration fees entitle the registrant to:

- Admission to all sessions, which includes over 30 hours of educational content
- Admission to the ASBMR Discovery Hall, which includes over 1500 scientific posters
- Friday's Welcome Reception
- All coffee breaks
- Digital copy of the 2013 Abstracts book
- Access to the abstracts online and itinerary builder
- Unlimited networking opportunities to collaborate with other leaders in the field

Abstracts Book

Every registration comes with a free digital version of the 2013 Abstracts book downloadable in pdf format or accessible on the ASBMR mobile app. However for those who prefer a printed/bound copy, these must be purchased in advance and can be picked up on-site.

Meet-the-Professor Booklet

Every registration comes with a free digital version of all the handouts provided in the Meet-the-Professor sessions in downloadable PDF format in advance of the meeting. However for those who prefer a printed/bound copy, these must be purchased in advance and picked up on-site.

Registration Information

Contents

What Are the Benefits of Registering Before August 8?

You not only receive a discount on your fees, but your badge and tickets will be mailed to you prior to the meeting, cutting down on your on-site registration time.

On-site Registration in Baltimore

Registration desks will be open for new registrants and material pick-up in the Baltimore Convention Center during the following hours:

Thursday, October 3 7:00 am – 6:00 pm
Friday, October 4 7:00 am – 7:00 pm
Saturday, October 5 7:00 am – 5:00 pm
Sunday, October 6 7:30 am – 5:00 pm
Monday, October 7 7:30 am – 4:00 pm

Refunds/Substitutions

Refunds for the main conference registration will be made if cancellation is received in writing by August 8, 2013. The items listed in the "Extra Events and Resources" section above, as well as all working groups, are nonrefundable at any time. Only current members at the time of registration are eligible for discounted member registration rates. ASBMR does not refund the difference in registration fees paid by individuals who register as nonmembers and later apply/are accepted as members. All refunds will be processed after the Annual Meeting and will be assessed a \$100 administrative fee.

There is no charge for substitutions. Eligibility requirements for Member or Student rates will apply. Late registration rates may apply to substitutions made after August 8, 2013. Once a badge is printed, changes can only be made on-site. Badge sharing is not allowed.

Admission

ASBMR shall have sole control over all admission policies at all times. Any person (including family members) visiting the exhibits/posters or attending any function of the meeting is required to register and wear an appropriate badge while in attendance. Children age 12 and under are not permitted in the Discovery Hall at any time. There are no exceptions to this policy. If child care is required, please make arrangements in advance. ASBMR Annual Meeting participants must abide by the Society's policy on re-use of meeting materials, which may be found on the ASBMR website.

Spouse/Guest Admission

Registered attendees may purchase a badge for one spouse/guest that includes admission to Friday's Welcome Reception as well as admittance to all Discovery Hall coffee breaks. These badges are intended for spouses/guests not employed or active in the field and do not include session attendance. Tickets for the ASBMR Bone Bash are a separate fee.

Group Registration

Tour leaders and other group organizers may register online using the same system as individuals. The system allows you to enter a list of delegates and enter the payment information only once at the end of the process. Once payment is complete, confirmations will be immediately sent to the confirmation e-mail address you provide. Your confirmation will include instructions on how to log on and request changes or additional receipts. To register a group of 10 or more, email <u>asbmr@showcare.com</u> for group registration instructions. Follow the excitement and opportunities...

Questions?

If you are an ASBMR member and do not have your membership number, please contact us at asbmr@asbmr.org or +1 (202) 367-1161.

If you have questions about your registration, please contact asbmr@showcare.com or +1 (202) 367-1173.

Visiting Baltimore

Baltimore is a vibrant destination, offering the science, culture, and entertainment you'd expect from a world-class city. Plus its convenient location puts it just an hour from Washington, DC and 90 minutes from Philadelphia. Check out some of these top destinations for plenty to do before and after the ASBMR 2013 Annual Meeting!

Visit the National Institutes of Health

The National Institutes of Health (NIH) is composed of 27 Centers and Institutes, including the Center for Scientific Review, the National Library of Medicine, and the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS). Tours of NIH are offered Monday through Friday, and the main campus's Bethesda location makes it only 40 minutes from the Baltimore Convention Center.



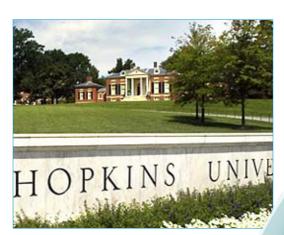


Be in Washington, D.C. in Under an Hour

Visit the Nation's Capital, located just 40 miles from Baltimore. The National Mall in Washington, D.C. is home to 11 Smithsonian museums, including Air and Space, American History, Natural History, and both American and African Art. The National Mall is also home to Washington's treasures, including the Washington Monument and the Lincoln and Jefferson Memorials. Tours of the United States Capitol are also available Monday through Saturday.

Visit Johns Hopkins University, a Powerhouse in Research

Located three miles from the Baltimore Convention Center, Johns Hopkins University is ranked by Times Higher Education World University Rankings as the 4th best university in the world for clinical, pre-clinical and health studies and 7th for life sciences. Between 1999 and 2009, Hopkins was the third most cited institution in the world. Tours are offered year round.



Contents

Visiting Baltimore

Discover a New World Under the Sea

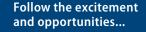
Named one of the best aquariums in the United States by the Travel Channel, the National Aquarium in Baltimore is home to over 16,000 animals of more than 660 species. The National Aquarium also features specialty exhibits like Shark Alley, Jellies Invasion, and Dolphin Discovery, which includes interactions with the dolphin team.





Tour the Inner Harbor

Baltimore's Inner Harbor, located right next to the Convention Center, is Baltimore's entertainment hub. Enjoy a variety of food options, including fresh seafood from the Chesapeake Bay. The Inner Harbor also features shopping, harbor cruises, and the Baltimore World Trade Center, the world's tallest equilateral 5-sided building. Looking for a vibrant nightlife scene? Power Plant Live, billed as Baltimore's "premiere dining and entertainment destination," is only one block away.





the second

Travel Information

The main airport to the area is the Baltimore/Washington International Thurgood Marshall Airport (BWI). The airport is located approximately 10 miles (a 15-minute drive) from the Baltimore Convention Center and downtown hotels. The airport offers free wireless internet throughout its terminals.

Alternate airports include Washington Dulles International Airport (IAD) which is 60 miles (1 hour) from Baltimore and Ronald Reagan Washington National Airport (DCA) which is 42 miles (50 minutes) from Baltimore. Taxicab and shuttle rides from IAD or DCA to Baltimore can be about \$120-\$150 in light traffic.

Discount Air Travel

Special ASBMR discounts are available with the following airlines:

Delta Airlines

Receive 5 percent off nonrefundable fares or 10 percent off full unrestricted coach fares. Book online at <u>www.delta.com</u>. Under "More Search Options" enter 418355 in the Meeting Event Code box. Or, book by phone at 800-328-1111.

United Airlines

Receive 2% to 10% off published fares. Save an additional 3% off by booking your own reservations at <u>www.united.com</u>. Enter ZQ65196941 in the Offer Code box. Or, book by phone at 800-426-1122, refer to Z Code ZQ65 and Agreement Code: 196941.

Ground Transportation from BWI Airport

- Taxicabs Approximate fare to downtown Baltimore is \$35. BWI Airport Taxi is the exclusive provider from the airport. They offer several vehicles equipped with wheelchair lifts. Please contact them in advance to ensure availability of wheelchair lifts—phone: +1 (410) 859-1100 or email: info@bwiairporttaxi.com.
- SuperShuttle This shared ride service is available 24 hours a day for \$15 each way. Sales counters are located at the lower level baggage claim 1 and 10. For reservations and information, contact <u>http://www.supershuttle.com</u> or 1-800-BLUE-VAN (+1 (800) 258-3826)

Light Rail – The Hunt Valley/BWI line runs from the airport with a stop at the Baltimore Convention Center. Fare is \$1.60 one-way for the 25 minute trip. The Light Rail at the airport is located immediately outside the lower level of the terminal building, adjacent to Concourse E. For schedules and hours of operation, call +1 (410) 539-5000 or go to mta.maryland.gov/light-rail.

E Special Needs

We want to ensure that you enjoy ASBMR's 2013 Annual Meeting. If, due to a disability, you have any special needs, please contact ASBMR at <u>asbmr@asbmr.org</u> or +1 (202) 367-1138 and we will do our best to assist you.

& Wheelchair Rentals

Scootaround is the preferred scooter and wheelchair rental service for the ASBMR 2013 Annual Meeting. Enjoy all aspects of the conference without concerns of mobility or stress on bones or joints. To reserve an assistive device for the ASBMR Annual Meeting, please call toll-free at +1 (888) 441-7575. For more information, please visit www.scootaround.com. Follow the excitement and opportunities...

Hotel Information

ASBMR has reserved rooms in the hotels listed on the following pages for your use. Reservations for these hotels must be made through the ASBMR Housing Bureau.

The Hotel Reservation Deadline Is Wednesday, September 4, 2013.

Why Book in the ASBMR Housing Block?

Booking your reservation outside of the ASBMR block of rooms via Internet travel sites or by not mentioning to the reservationists that you are with ASBMR has a long-term negative impact on the ASBMR meeting. The amount of rooms that ASBMR can attribute as reserved by ASBMR attendees helps us to negotiate rates with the city's meeting facilities. With fewer rooms directly attributable to ASBMR, convention center rental rates will rise, which impacts the rates ASBMR can charge for meeting registration. Additionally, hotels place financial penalties on associations for each room not used by our attendees. We appreciate you supporting ASBMR by booking hotel rooms within our official block.

As an extra incentive to book with ASBMR, ASBMR has worked with several of the hotels in Baltimore to provide extra benefits just for attendees staying in our hotel blocks, including complimentary or discounted Internet access for guests who booked through the ASBMR Housing Bureau.

ASBMR International Group Housing

ASBMR International Groups Department (ASBMR IGD) offers international groups and sponsors official group housing blocks for the ASBMR Annual Meetings. Take advantage of our all-inclusive travel packages that include preferred properties, breakfast, porterage, gratuities and your own personal multilingual meeting planner from online to onsite; all at the lowest possible rates. Visit <u>www.asbmr-igd.com</u> or email <u>ASBMRgrouphousing@asbmr-igd.com</u> for more information.

ASBMR US Group Housing

ASBMR has special group housing forms and reservation processes available to those groups requiring five or more hotel rooms during the ASBMR 2013 Annual Meeting. To block rooms for groups of five or more people coming from the United States, please contact Jessica Klapstein, ASBMR Housing Coordinator at jklapstein@asbmr.org.

Hotel Comparison Chart

		Distance to Convention Center					ırs)	ty				
Hotel	Rate*	Miles	Blocks	Walk (mins)	Mobil Rating	AAA Rating	Internet Cost (24 Hours)	24 Hour Fitness Facility	Spa	Indoor Pool	Parking	Additional Amenities
Headquarter Hotel: Hilton Baltimore 401 West Pratt Street Baltimore, MD 21201 (connected via Skywalk)	\$219 Single/ Double	0.2		2	****	****	FREE	Yes	Yes	Yes	Self: \$28/Day Valet: \$40/Day	
Baltimore Marriott Inner Harbor at Camden Yards 110 South Eutaw Street Baltimore, MD 21201	\$209 Single/ Double	0.3	3	4	***	***	FREE	Yes	No	No	Self Only: 4-12 hrs: \$16 1-24 hrs: \$26	UPS Store on property
Baltimore Marriott Waterfront 700 Aliceanna Street Baltimore, MD 21202	\$199 Single/ Double	1.4	11	15	***	****	FREE	Yes	No	Yes	Self: \$26/Day Valet: \$40/Day	
Days Inn Inner Harbor Baltimore 100 Hopkins Place Baltimore, MD 21201	\$139 Single/ Double	0.25	0.5	2	***	**	FREE	Yes	No	No	Self: \$23/Day	Heated outdoor pool (seasonal)
Hampton Inn Baltimore Downtown/ Convention Center 550 Washington Blvd. Baltimore, MD 21230	\$155 Single/ Double	0.4	3	5	***	***	FREE	Yes	No	Yes	Valet Only: \$29/Day	Complimentary Hot Breakfast; Laundry Service; Complimentary Business Center
Holiday Inn Inner Harbor Baltimore 301 West Lombard St. Baltimore, MD 21201	\$159 Single/ Double	0.2	1	3	***	***	FREE	Yes	No	Yes	Self Only: \$25/Day	Dry Sauna, 24 Hour Business Center
Hotel Monaco 2 North Charles Street Baltimore, MD 21201	\$169 Single/ Double	0.3	4	8	****	****					Valet Only: \$36/Day	Complimentary Coffee and Tea served from 6am -9am daily.
							FREE	Yes	No	No		Complimentary wine hour from 5pm – 6pm.

Follow the excitement and opportunities...

*Does not include taxes.

See page 42 for more hotels

Hotel Comparison Chart

		Distance to Convention Center					irs)	ity				
Hotel	Rate*	Miles	Blocks	Walk (mins)	Mobil Rating	AAA Rating	Internet Cost (24 Hours)	24 Hour Fitness Facility	Spa	Indoor Pool	Parking	Additional Amenities
Hyatt Regency Baltimore 300 Light Street Baltimore, MD 21202 (connected via Skywalk)	\$209 Single/ Double	0.11		2	***	****	FREE	Yes	No	No	Self: \$28/Day Valet: \$40/Day	
Renaissance Harborplace Hotel 202 East Pratt Street Baltimore, MD 21201	\$199 Single/ Double	0.2	2	5	****	****	FREE	Yes	No	Yes	Self: \$28/Day Valet: \$40/Day	
Sheraton Baltimore City Center 101 West Fayette Street Baltimore, MD 21201	\$169 Single/ Double	0.1	2.5	5	***	***	\$9.95	Yes	No	No	Valet Only: \$32/Day	
Sheraton Inner Harbor Hotel 300 S. Charles Street Baltimore, MD 21201 (attached via Skywalk)	\$215 Single/ Double	0.12		2	***	***	FREE	Yes	No	Yes	Self: \$27/Day Valet: \$33/Day	Newly renovated fitness center.

*Does not include taxes.





Orange Line (Hollins Market-Harbor East)



Follow the excitement and opportunities...