4th New York Skeletal Biology and Medicine Conference

Vital new insights into the mechanisms of bone development and restructuring, including cellular and mechanical triggers, receptors and signaling pathways have gleaning recently. These strides have been made possible through the use of genetically manipulated mice, gene and protein discovery and the cataloguing of human mutations. Significant also are the effects of other physiological systems and disease states, such as the immune system inflammation, diabetes, infection and cancer on musculoskeletal health. These recent findings are shaping therapeutic directions to focus on both anti-resorptive and anabolic therapies. A better understanding of the fundamentals of skeletal biology, the pathophysiology associated with skeletal disease, and the molecular and genetic basis of these disorders will impact significantly on our ability to find new effective treatments. The 2011 NYSBM will combine basic, clinical and translational research in a forum designed to provide the most current information on aspects of skeletal morphogenesis and remodeling in health and disease.

Target Audience
The target audience will comprise of basic scientists, clinical investigators and clinicians with interests in endocrinology, physiology, cell biology, pathology, genetics, molecular biology, rheumatology and oncology as well as other areas that relate to bone development and homeostasis.

GOALS AND OBJECTIVES
The goals of this 2011 NYSBM are to:
(1) examine the physiology of bone development;
(2) explore the pathophysiology of skeletal diseases; and
(3) discuss improved treatment paradigms for bone disease.

At the conclusion of this CME activity, the participant will be able to:
(1) describe the role of growth factors, nuclear receptors, cytokines, neurohormones and the nervous system in bone development and homeostasis;
(2) examine the impact of genetics, immune function, infection and cancer on bone development and disease; and
(2) assess a variety of treatment options for bone diseases.

ACKNOWLEDGEMENT OF SUPPORT
This activity has been made possible in part by educational grants from:
Educational grants from:
- Amgen Pharmaceuticals
- Abbott Pharmaceuticals
- Eli Lilly & Company
- Genentech
- Merck & Company
- Warner Chilcott Pharmaceuticals

Donations from:
- Erving and Joyce Wolf Foundation
**4th New York Skeletal Biology and Medicine**

**PRELIMINARY PROGRAM**

**WEDNESDAY, APRIL 27, 2011 10:00 AM - 9:30 PM - AT MOUNT SINAI SCHOOL OF MEDICINE**

10:00 am – 12:30 pm  **Registration**

12:30 pm – 12:35 pm  **Welcoming Remarks**  
**Mone Zaidi, MD, PhD, Mount Sinai School of Medicine**

12:35 pm – 2:15 pm  **Advances in Skeletal Medicine**  
**Moderators:**  
Harry Genant, MD, University of California, San Francisco  
Tony Keaveny, PhD, University of California, Berkeley

Imaging of Skeleton Quality  
Sharmila Majumdar, MD, University of California, San Francisco  
Skeletal QCT Imaging  
Klaus Engelke, Ph.D, University of Erlangen, Numberg  
Material and Structural Determinants of Fracture  
Mary Bouxsein, PhD, Harvard Medical School  

Genetics of Bone Strength  
Stuart Ralston, MD, Aberdeen University  

2:15 pm – 2:45 pm  **Coffee**

2:45 pm – 4:25 pm  **Advances in Skeletal Therapeutics**  
**Moderators:**  
Robert Neer, MD, Harvard Medical School  
Uri A. Lieberman, MD, PhD, University of Tel Aviv

Early Post-Menopausal Bone Loss and What to Do About It  
Robert Recker, MD, Creighton University

4:30 – 5:15 pm  **Diane Wolf Memorial Inaugural Lecture**  
**Chair:**  
Mone Zaidi, MD, PhD, Mount Sinai School of Medicine  
To be determined

6:30 – 9:30 PM  **Faculty Dinner**  
New York Academy of Medicine Library  
1216 Fifth Avenue at 103rd street & 5th Ave; 6th Floor Library  
Welcome:  
**Mone Zaidi, MD, PhD, Mount Sinai School of Medicine**  
**Stephen I. Katz, MD, PhD**  
Director, National Institute of Arthritis and Musculoskeletal and Skin Diseases  
“NIH Support of Skeletal Biology and Medicine”  
Introduced By:  
**Cliff Rosen, MD, Maine Medical Center, Portland**  
[By Invitation Only]

**THURSDAY, APRIL 28, 2011 7:00 AM - 8:00 PM - AT MOUNT SINAI SCHOOL OF MEDICINE**

7:30 – 8:30 AM  **Registration & Continental Breakfast**

8:30 – 9:10 AM  **The 2nd Iain MacIntyre Memorial Lecture**  
**Chair:**  
Gerard Karsenty, MD, PhD, Columbia University  
New Mechanisms of Bone Development  
Henry Kronenberg, MD, Harvard Medical School

9:10 – 10:25 AM  **Breakthroughs in Bone Morphogenesis and Remodeling**  
**Moderators:**  
Arthur Broadus, MD, Yale University  
Francis Glorieux, MD, McGill University

Novel Cell Autonomous Signaling Mechanisms in the Skeleton  
Gerard Karsenty, MD, PhD, Columbia University  
Micro RNA Regulation of the Osteoblast  
Brendan Lee, MD, PhD, Baylor College of Medicine  
Osteoblast Regulation: An Update  
Laurie Glumcher, PhD, Harvard University

10:25 – 11:00 AM  **Coffee Break**

11:00 – 12:40 PM  **Novel Insights into Bone and Cartilage Homeostasis**  
**Moderators:**  
David Roodman, MD, University of Pittsburgh  
Nicky Partridge, PhD, New York University

**Gregory Mundy Memorial Lecture**  
Coupling of Bone Resorption and Formation  
Xu Cao, PhD, Johns Hopkins University  
MAP Kinase Signaling and Chondrocyte Differentiation  
Regis O’Keefe, MD, PhD, University of Rochester  
Novel Mechanisms of Bone Formation  
Subburaman Mohan, PhD, Loma Linda University  
Notch in the Adult Skeleton  
Ernesto Canalis, MD, University of Connecticut

12:40 – 1:50 PM  **Lunch**

1:50 – 2:30 PM  **Keynote Lecture**  
**Chair:**  
Regis O’Keefe, MD, PhD, University of Rochester  
New Tools for 3D Cell and Tissue Culture  
**George Whitesides, PhD, Harvard University**

2:30 – 3:45 PM  **Osteoclast Biology**  
**Moderators:**  
David Goldtman, MD, McGill University  
John Williams, PhD, National Institute on Aging, Bethesda

Epigenetic Regulation of the Osteoclast  
Sakae Tanaka, MD, PhD, Tokyo Medical and Dental School  
Immunoglobulins in Osteoclast Control  
Hiroshi Takayanagi, MD, PhD, University of Tokyo  
A Peep Under an Osteoclast  
Tim Chambers, MBBS, PhD, St. George’s Hospital, University of London

3:45 – 4:15 PM  **Coffee Break**

4:15 – 5:55 PM  **Topics Beyond Bone**  
**Moderators:**  
Mary Goldring, PhD, Cornell University  
Sol Epstein, MD, Mount Sinai School of Medicine

CD44 Deficiency Alters Tendon Healing in a Mouse Patellar Tendon Model  
Louis Soslowsky, PhD, University of Pennsylvania  
Cell Biology of Tendon  
Evan Flatow, MD, Mount Sinai School of Medicine  
Bone Marrow Cells and Diabetes  
Larry Chan, MD, Baylor College of Medicine  
Micro RNA Profiling to Design Personalized Therapy in Cancer  
Murray Korc, MD, Dartmouth Medical School

6:10 – 8:00 PM  **Young Investigator Poster Session**

6:30 – 9:30 PM  **Wine and Cheese Reception**  
Annenberg Lobby, Mount Sinai School of Medicine  
Welcome:  
**Jameel Iqbal, MD, PhD, Mount Sinai School of Medicine**  
**Alberta Zallone, PhD, University of Bari**  
**Xu Cao, PhD, Johns Hopkins School of Medicine**  
**Michael Pazianas, MD, Oxford University**  
**Li Sun, MD, PhD, Mount Sinai School of Medicine**
FRIDAY, APRIL 29, 2011 7:00 AM - 10:00 PM - AT MOUNT SINAI SCHOOL OF MEDICINE

7:00 – 8:00 AM Registration & Continental Breakfast
8:00 – 8:40 AM Keynote Lecture
Chair: Chris Huang, MD, PhD, DSc, University of Cambridge
Genomics, Proteomics and New Medicines
Sir Tom Blundell, FRS, University of Cambridge

8:40 – 9:55 AM Bone Genes
Moderators: Ethelyn Wang Jabs, MD, PhD, Mount Sinai School of Medicine
The Metamorphosis - 2011
Fred Kaplan, MD, University of Pennsylvania
Pathological Growth Plate Next to a Growth Plate
Maurizio Pacifici, PhD, Jefferson University
Genetics of Metachondromatosis
Matthew Warman, MD, Harvard University

9:55 – 10:20 AM Coffee Break

10:20 – 11:35 AM Novel Regulators of Bone
Moderators: Ernestina Schipani, MD, PhD, Harvard University
Co-Repressors in Osteoblast Development
Roland Baron, DDS, PhD, Harvard University
T-Cells Mediate PTH Effects on Bone
Roberto Pacifici, MD, Emory University
Proteomes for Bone Diseases
Larry Suva, MD, University of Arkansas

11:35 – 12:50 AM Visualizing Skeletal Pathophysiology
Moderators: Roy Aaron, MD, Brown University
Lynda Bonewald, PhD, University of Missouri
Osteocyte Network in Mechanical Memory
Ed Guo, PhD, Columbia University
Nanomechanics of Bone and Bone-like Materials
Huajian Gao, PhD, Brown University
Toilet Bowl Hypothesis of Arthritic Flare
Edward Schwarz, PhD, University of Rochester

12:50 – 2:00 PM Lunch
2:00 – 3:40 PM Integrative Physiology
Moderators: Harry Blair, MD, University of Pittsburgh
Alice Levine, MD, Mount Sinai School of Medicine
Parasympathetic Control of the Skeleton
Itai Bab, DDS, PhD, Hebrew University
Update on the Pituitary-Bone Axis
Mone Zaidi, MD, PhD, Mount Sinai School of Medicine
Alberta Zallone, PhD, University of Bari, Italy
Role of Inhibin in Skeletal Remodeling
Dana Gaddy, PhD, University of Arkansas
Prolactin and the Gut
Sylvia Christakos, PhD, UMDNJ - New Jersey Medical School

3:40 – 4:10 PM Coffee Break
4:10 – 5:25 PM Hot Topics in Cell Signaling
Moderators: Ronald Margolis, PhD, National Institutes of Diabetes and Digestive and Kidney Diseases
William Chin, MD, Harvard Medical School
Epigenetic Regulation of Chromatin Reorganization in Bone Cells
Shige Kato, PhD, University of Tokyo
Calcium Signaling in Breast Cancer
John Wyssolmerski, MD, Yale School of Medicine
Role for NF-kB Signaling in Hematopoietic Stem Cells
Brendan Boyle, MD, University of Rochester

5:25 – 6:15 PM The 3rd Rosalyn Yalow Lecture
Chairs: John Potts, MD, Harvard University
Erik Langhoff, MD, Bronx VA Medical Center
Developmental Programming of Adipose Tissue and the Origins of Obesity
C. Ron Kahn, MD, Joslin Diabetes Center, Harvard Medical School

6:15 – 7:30 PM Conference Banquet
Loeb Boathouse, Central Park, New York

SATURDAY, APRIL 30, 2011 7:30 AM - 5:00 PM - AT MOUNT SINAI SCHOOL OF MEDICINE

7:30 – 8:30 AM Registration & Continental Breakfast
8:30 – 9:10 AM Keynote Lecture
Chair: Theresa Guise, MD, Indiana University
New Therapies for Leukemia
Charles Sawyers, MD, Memorial Sloan Kettering Medical Center, New York

9:10 – 10:50 AM Cell Communication
Moderators: Philip Osdoby, PhD, Washington University
Tom Clemens, PhD, Johns Hopkins University
Independent Mediation of Bone Metastasis by CDB™ T Cells
Roberta Faccio, PhD, Washington University
Identity of Mesenchymal Stem Cells
Paul Frenette, MD, Albert Einstein College of Medicine
Bone Turnover Modulation by Connexin-43
Roberto Civitelli, MD, Washington University
Transcriptional Signaling Cascades in the Parathyroid
Raj Thakker, MD, FRCP, Oxford University

10:50 – 12:00 AM Trainee Presentations
Chair: Allen Spiegel, MD, Albert Einstein School of Medicine
12:00 – 1:00 PM Lunch
1:00 – 2:15 PM Hot Topics in Skeletal Biology
Moderators: Patricia Collin-Osdoby, PhD, Washington University
Steve Goldring, MD, Cornell University
Vitamin D and Fracture Healing
Rene St. Arnaud, PhD, McGill University
β-Catenin in Disc Degeneration
Di Chen, PhD, University of Rochester
Timekeeping and the Regulation of Body Composition
Cliff Rosen, MD, Maine Institute of Research

2:15 – 2:45 PM “Rising Star” Presentations I
Chairs: Keith Hruska, MD, Washington University
Narayan Avadhani, PhD, University of Pennsylvania

7:00 – 10:00 PM Conference Banquet
Loeb Boathouse, Central Park, New York
CONFERENCE LOCATION
Goldwurm Auditorium (Lobby Level)
Icahn Medical Institute
Mount Sinai School of Medicine
1425 Madison Avenue (between 98th & 99th Streets)
New York, NY 10029
http://www.mountsinaihospital.org/visiting-us/directions

ACCOMMODATIONS*
The Waldorf Astoria, 301 Park Avenue, (between 49th and 50th)
New York, NY 10022
Tel: 212-355-3000
http://www.waldorfastoria.com

*To obtain the discounted accommodation rate of $255 single/double occupancy, plus tax per night (currently at 14.75% plus $3.50 occupancy tax per room per night), please telephone reservations at 1-877-GROUPWA or 1+ 212-355-3000, and indicate that you are reserving with Mount Sinai School of Medicine (Code: MTS).

Reservation Deadline: Wednesday, April 6, 2011.

SPECIAL NEEDS
Mount Sinai School of Medicine is in full compliance with provisions of the Americans with Disabilities Act and is accessible for individuals with special needs. If you have any special needs or require special accommodations, please contact the Office of CME at 212-731-7950.

CONFERENCE INFORMATION
Please call The Page and William Black Post-Graduate School at 212-731-7950 or email to: joy.takeuchi@mssm.edu

THREE WAYS TO REGISTER
Online: http://www.mssm.edu/cme/courses/skeletalbio
Fax: 212-731-7930
Mail: The Page and Black Post-Graduate School
Mount Sinai School of Medicine
One Gustave L. Levy Place, Box 1193
New York, NY 10029
Email: joy.takeuchi@mssm.edu

CALL FOR ABSTRACTS
We invite abstracts for a Poster Session. Of the submitted abstracts, several will be chosen for short oral presentations. Deadline for abstract submission is January 31, 2011. Subject to editorial review, all abstract presenters will be requested to submit a short manuscript for publication in the Annals of the New York Academy of Sciences which is PubMed indexed. Please send a 250 word abstract to: li.sun@mssm.edu.

FELLOWSHIPS
Subject to available funding, a limited number of fellowships in the form of travel stipends will be awarded to qualified junior investigators. Individuals applying for a fellowship will be expected to author a poster presentation (sole or first authorship is required). Applicants must provide an original fellowship request letter on letterhead (university department, organization etc.) with a counter signature from a department chair or supervisor verifying student, postdoctoral fellow or clinical fellow status.

Mail this original letter to: Li Sun, MD, PhD, Box 1055, Endocrinology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029 for receipt by Friday, February 27, 2011.
or
E-mail scanned letters to: li.sun@mssm.edu
(Dr. Li Sun, Tel: 212-241-3054)

Qualified women and minority scientists are encouraged to apply.

REGISTRATION FEE AND CATEGORIES
Fees Include:
Group Catered Events

Category | Space is limited so please register early.
----------|------------------
Academia/Non Profit | $700
Corporate | $1000
Student/Fellow | $350

Cancellations
All cancellations must be made in writing to The Page and William Black Post-Graduate School by April 4, 2011 for refund. An administrative fee of $50 will be retained. No refunds will be made after this date or for “no shows.”

Oxytocin in Estrogen Action
Graziana Colaianni, PhD, University of Bari, Italy

Ligament Development and Molecular In Signals
Ronen Schweitzer, PhD, Oregon Health Sciences University, Portland

4:00 – 4:45 PM | The 3rd Gideon Rodan Memorial Lecture
Chairs:
Sevgi Rodan, PhD, University of Pennsylvania
Michael Rosenblatt, MD, Merck and Co.
The Osteoclast and Its Unique Cytoskeleton
Steve Teitelbaum, MD
Washington University

4:45—5:00 PM | Concluding Remarks and Adjourn
REGISTRATION FORM - SKELETAL BIOLOGY AND MEDICINE - APRIL 27 - APRIL 30, 2011

Please type or print legibly below or register on-line at
http://www.mssm.edu/cme/courses/skeletalbio
SPACE IS LIMITED; PLEASE REGISTER EARLY

First Name                     Last Name                     Degree
Affiliation/Organization
Street address
City                          State                         Zip
Country
Telephone                     Fax

□ Academia/Non Profit $700  □ Corporate $1000  □ Student/Fellow $350

THREE WAYS TO REGISTER
• ONLINE at http://www.mssm.edu/cme/courses/skeletalbio
• FAX completed registration to 212-731-7930
• MAIL this form with your check to:
  Mount Sinai School of Medicine, One Gustave L. Levy Place, Box 1193, New York, NY 10029
  Enclosed is my check for $________ payable to The Page and William Black Post-Graduate School
  Bill my credit card $_________ Visa MasterCard American Express
  Card#: ______________________ Expiration Date: ______________________

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Cardholder Signature: ____________________________

Mount Sinai School of Medicine
The Page and William Black Post-Graduate School
One Gustave L. Levy Place, Box 1193
New York, NY 10029

4th New York
Skeletal Biology and Medicine Conference
April 27 - April 30, 2011

Goldwurm Auditorium
Mount Sinai School of Medicine
New York, New York

REGISTER ONLINE AT http://www.mssm.edu/cme/courses/skeletalbio

Abstract submission deadline is January 31, 2011

ACCREDITATION
Mount Sinai School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CREDIT DESIGNATION
Mount Sinai School of Medicine designates this educational activity for a maximum of 27 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

FACULTY DISCLOSURE
It is the policy of Mount Sinai School of Medicine to ensure objectivity, balance, independence, transparency and scientific rigor in all CME-sponsored educational activities. All faculty participating in the planning or implementation of a sponsored activity are expected to disclose to the audience any relevant financial relationships and to assist in resolving any conflict of interest that may arise from the relationship. Presenters must also make a meaningful disclosure to the audience of their discussions of unlabeled or unapproved drugs or devices. This information will be available as part of the course material.

VERIFICATION OF ATTENDANCE will be provided to all professionals.