Arnold and Madaleine Penner
5th Annual Musculoskeletal Repair and Regeneration Symposium
Thursday, October 13, 2016

Program Director: Hui (Herb) B. Sun, PhD
University Chairman, Department of Orthopaedic Surgery: Neil J. Cobelli, MD

Presented by: Musculoskeletal and Orthopaedic Research Laboratories and Department of Orthopaedic Surgery at Einstein College of Medicine and Montefiore Medical Center

Albert Einstein College of Medicine
Michael F. Price Center and Harold and Muriel Block Research Pavilion
1301 Morris Park Avenue
Bronx, NY 10461
SYMPOSIUM MISSION
The Albert Einstein College of Medicine Musculoskeletal Repair and Regeneration Symposium seeks to expand the knowledge base within the field, and to foster creativity, collaboration and networking between researchers throughout the region. This year's meeting will emphasize recent advances in translational research in four areas:

- Stem cells and tissue repair: in tendon and beyond
- Novel views into the disc and other degenerative diseases
- New insights in arthritis
- Bone adaption in aging and disease

HIGHLIGHTS FOR 5th ANNUAL SYMPOSIUM
- Dynamic sessions based on the vision and primary contribution from the Steering Committee and Session Chairs: Susannah Fritton, PhD, John A. Hardin, MD, James Iatridis, PhD, Helen H. Lu, PhD.
- World-class scientists, including keynote speakers, will share their viewpoints and their most exciting up-to-date translational research.
- Outstanding speakers from new participating institutions including: University of California, Johns Hopkins University, Rensselaer Polytechnic Institute, Cornell University, Thomas Jefferson University, University of Texas Health Science Center at Houston, and Zhejiang University.

SYMPOSIUM LOCATION AND DATE
October 13, 2016
LeFrak Auditorium (Room 151), Price Center
Albert Einstein College of Medicine
1301 Morris Park Ave. Bronx, NY 10461

STATEMENT OF NEED
Damage to musculoskeletal tissues is a significant cause of morbidity and increased mortality, and is a magnifier of mortality in other clinical diseases such as diabetes and cardiovascular disorders. The innate repair capacities are limited for articular cartilage, tendon, and extensive bone defects.
In addition, current treatments for the repair of injured musculoskeletal tissue are not sufficient to restore the functionality of the original tissue. These daunting challenges present a desperate need for a better understanding of musculoskeletal biology and emphasize the importance of discovering novel repair and regeneration strategies that can be translated to clinical use.

GOALS
This program will address current issues in musculoskeletal repair and regeneration, and disease treatment. Discussions will focus on up-to-date laboratory discoveries and the potential impact of these findings on patient treatment and management in the future.

REGISTRATION
Deadline: October 10, 2016
Registration includes continental breakfast, lunch, and reception.
Registration is free. Early registration is highly recommended.
Click here to register

CALL FOR ABSTRACTS / YOUNG INVESTIGATOR AWARD

POSTER SESSION
We invite investigators to submit abstracts for the poster session, which is an important component of this conference. Posters will be displayed throughout the day with a dedicated poster session.

YOUNG INVESTIGATOR AWARD
Abstracts from graduate students and postdoctoral fellows will be considered for Young Investigator Awards. Three winners will be announced and each will be presented with prize and a plaque during the evening session. Winners will have the opportunity to give a brief highlight of their work (2 minutes) at the end of the award ceremony.
To qualify, you must register and submit an abstract to Dr. Mia M. Thi, the chair of the Poster Session and Young Investigator Award committee, by September 26, 2016 via email to: mia.thi@einstein.yu.edu.

ABSTRACT GUIDELINES
The abstract is limited to 1 page. Include in your abstract the study's objective, a brief statement of methods, a summary of the results obtained, conclusions, and significance. Please see abstract guidelines on the website. As the Symposium aims to promote communication within our region, we encourage you to submit your recent work (within 2015-2016) to this Symposium, including work that may have been submitted to other meetings.
PROGRAM COMMITTEE
PROGRAM DIRECTOR
Hui B. Sun, PhD

STEERING COMMITTEE CHAIRS
• Helen Lu, PhD
• James Iatridis, PhD
• John Hardin, MD
• Susannah Fritton, PhD

PROGRAM OVERSEERS
• Di Chen, PhD
• Mary Goldring, PhD
• Ed Guo, PhD
• Jeremy Mao, DDS, PhD
• Maurizio Pacifici, PhD
• Yi-Xian Qin, PhD
• Mitchell Schaffler, PhD

POSTER SESSION AND YOUNG INVESTIGATOR AWARD COMMITTEE
• Chair: Mia Thi, PhD
• Co-chair: David Hirsh, MD
• Co-chair: Bang Hoang, PhD
• Co-chair: Robert J. Majeska, PhD
• Co-chair: Jeremy J. Mao, DDS, PhD
• Co-chair: Maurizio Pacifici, PhD
• Co-chair: Sylvia O. Suadicani, PhD
AGENDA

7:15 – 8:00 am  Check-in and continental breakfast
8:00 – 8:10 am  Opening remarks
Neil J. Cobelli, MD

Session 1 - Stem cells and tissue repair and regeneration: in tendon and beyond
Steering Chair: Helen Lu, PhD

8:10 – 8:35 am  Evaluation of Tendon-Specific Endothelial-Derived Stem Cells in Rotator Cuff Repair
Scott Rodeo, MD
The Hospital for Special Surgery

8:35 – 9:00 am  Stem Cells and Skeletal Muscle Tissue Engineering
Johnny Huard, PhD
University of Texas Health Science Center at Houston

9:00 – 9:25 am  Regulation of tendon regeneration
Alice Huang, PhD
Icahn School of Medicine at Mount Sinai

9:25 – 9:50 am  Tendon / cartilage differentiation and regeneration
Hongwei Ouyang, M.D., PhD
Zhejiang University, China

9:50 – 10:10 am COFFEE BREAK

Session 2 – New insights in arthritis
Steering Chair: John Hardin, MD

10:10 – 10:30 am  Autoimmunity in Juvenile Idiopathic Arthritis
Laura Santambrogio, PhD
Albert Einstein College of Medicine

10:30 – 10:50 am  Regulation of inflammatory responses in tumor necrosis factor-activated and rheumatoid arthritis synovial macrophages by JAK inhibitors
Lionel Ivashkiv, MD
The Hospital for Special Surgery

10:50 – 11:10 am  Beta-catenin is a Key Mediator in the Development of Spondyloarthritis
Di Chen, PhD
Rush University

11:10 – 11:30 am  Energy sensor AMPK in cartilage homeostasis and osteoarthritis
Ru Liu-Bryan, PhD
University of California, San Diego
Session 3 – Novel views into musculoskeletal degenerative diseases
Steering Chair: James Iatridis, PhD

1:45 – 2:10 pm
Elucidating Mechanisms of Tendon Damage by Measuring Multiscale Unloaded Recovery Following Tensile Loading
Dawn Elliot, PhD
University of Delaware

2:10 – 2:35 pm
In search of biomarkers of back pain: systemic cytokine profiles in patients with intervertebral disc disorders
Nadeen Chahine, PhD
The Feinstein Institute for Medical Research

2:35 – 3:00 pm
Insights into a novel autophagic pathway in nucleus pulposus cells
Makarand V. Risbud, PhD
Thomas Jefferson University

3:00 – 3:25 pm
Injury, inflammation, and altered mechanotransduction in the intervertebral disc
James Iatridis, PhD
Icahn School of Medicine at Mount Sinai

3:25 – 3:45 pm COFFEE BREAK

Session 4 – Bone Adaptation in Aging and Disease
Steering Chair: Susannah Fritton, PhD

3:45 – 4:05 pm
Bone mineralization changes due to aging and disease
Adele Boskey, PhD
Hospital for Special Surgery

4:05 – 4:25 pm
Effects of bone matrix proteins on fracture and fragility
Deepak Vashishth, PhD
Rensselaer Polytechnic Institute

4:25 – 4:45 pm
Mechanical adaptation of the skeleton during homeostasis and repair
Alesha Castillo, PhD
New York University
4:45 – 5:05 pm  
Role of estrogen signaling in load-based skeletal adaptation  
Marjolein van der Meulen, PhD  
Cornell University

5:05 - 5:25 pm  
Low magnitude mechanical signals as an anabolic signal to the skeleton in aging and disease  
Clint Rubin, PhD  
Stony Brook University

Young Investigator Awards / Reception (Lubin Hall)

5:30 pm  
Young Investigator Awards  
Chair: Mia M. Thi, PhD

5:40 pm  
Closing remarks  
Neil J. Cobelli, MD

5:40 – 6:15 pm  
Reception and networking
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FACULTY MEMBERS

Adele Boskey, PhD
Starr Chair, Mineralized Tissue Research
Hospital for Special Surgery
Professor of Biochemistry, Physiology, Biophysics and Systems Biology
Weill Cornell Medical College
New York, NY

Xu Cao, PhD
Lee Riley Professor of Orthopaedic Surgery
Johns Hopkins University
Baltimore, MD

Alesha Castillo, PhD
Assistant Professor of Mechanical and Aerospace Engineering and Orthopaedic Surgery
New York University
New York, NY

Nadeen Chahine, PhD
Associate Professor of Molecular Medicine, Neurosurgery, Orthopedic Surgery, Hofstra Northwell School of Medicine
Associate Investigator, Center for Autoimmune and Musculoskeletal Diseases, The Feinstein Institute for Medical Research
New York, NY

Di Chen, MD, PhD
The John W. and Helen Watzek Professor and Chairman of Biochemistry
Rush University
Chicago, IL

Neil J. Cobelli, MD
Professor and University Chairman
Department of Orthopaedic Surgery
Albert Einstein College of Medicine and Montefiore Medical Center
Bronx, NY

Dawn Elliot, PhD
Professor and Chair of Biomedical Engineering
University of Delaware
Newark, DE

Susannah Fritton, PhD
Associate Professor of Biomedical Engineering
The Grove School of Engineering, The City College of New York
New York, NY

Mary B. Goldring, PhD
Professor of Cell and Development Biology
Weill Cornell Medical College of Cornell University
Senior Scientist
Hospital for Special Surgery
New York, NY

Richard G. Gorlick, MD
Vice Chairman, Department of Pediatrics
Professor, Departments of Pediatrics, and Molecular Pharmacology
Chief, Division of Pediatric Hematology and Oncology, Department of Pediatrics
Albert Einstein College of Medicine and Montefiore Medical Center
Bronx, NY

X. Edward Guo, PhD
Professor and Vice Chair of Biomedical Engineering
Columbia University
New York, NY

John A. Hardin, MD
Professor of Medicine, Microbiology & Immunology and Orthopaedic Surgery
Albert Einstein College of Medicine and Montefiore Medical Center
Bronx, NY
David M. Hirsh, MD  
Professor of Orthopaedic Surgery  
Albert Einstein College of Medicine  
Director, Joint Replacement Service  
Montefiore Medical Center  
Bronx, NY

Bang H. Hoang, MD  
Associate Professor of Department of Orthopaedic Surgery  
Albert Einstein College of Medicine and Montefiore Medical Center  
Bronx, NY

Alice Huang, PhD  
Assistant Professor of Orthopaedics  
Icahn School of Medicine at Mount Sinai  
New York, NY

Johnny Huard, PhD  
Professor of Orthopaedic Surgery  
University of Texas Health Science Center at Houston  
McGovern Medical School  
Houston, TX

James Iatridis, PhD  
Professor of Orthopaedics and Neurosurgery  
Chair for Research  
Director of Spine Research  
Icahn School of Medicine at Mount Sinai  
New York, NY

Lionel Iwashkiv, MD  
Chief Scientific Officer  
The Hospital for Special Surgery  
Professor of Medicine and Immunology  
Weill Cornell Medical College of Cornell University  
New York, NY

Ru Liu-Bryan, PhD  
Associate Professor of Medicine  
University of California San Diego School of Medicine  
San Diego, CA

Helen H. Lu, PhD  
Professor of Biomedical Engineering  
Chair, Graduate Studies  
Columbia University  
New York, NY

Robert J. Majeska, PhD  
Adjunct Professor of Biomedical Engineering  
Grove School of Engineering  
The City College of New York  
New York, NY

Jeremy J. Mao, DDS, PhD  
Professor and Edwin S. Robinson Endowed Chair of Dental Medicine and Orthopaedics  
Co-Director, Center for Craniofacial Regeneration  
Columbia University College of Dental Medicine  
New York, NY

Marjolein van der Meulen, PhD  
James M. and Marsha McCormick Director of Biomedical Engineering  
Swanson Professor of Biomedical Engineering  
Cornell University  
Ithaca, NY

Hongwei Ouyang, M.D., PhD  
Executive Dean and Professor of Basic Medicine  
Zhejiang University School of Medicine  
China

Maurizio Pacifici, PhD  
Professor of Orthopaedic Surgery  
University of Pennsylvania School of Medicine  
Director of Orthopaedic Research  
Children’s Hospital of Philadelphia  
Philadelphia, PA

Yi-Xian Qin, PhD  
Professor of Biomedical Engineering, Orthopaedics and Biophysics  
State University of New York at Stony Brook  
Director, Orthopaedic Bioengineering Research
Laboratory
Stony Brook University Medical Center
Stony Brook, NY

Makarand V. Risbud, PhD
Professor of Cell and Developmental Biology
Jefferson College of Biomedical Sciences
Thomas Jefferson University
Philadelphia, PA

Scott Rodeo, MD
Professor of Orthopedic Surgery at Weill
Cornell Medical College
Co-Chief Emeritus of the Sports Medicine and
Shoulder Service at Hospital for Special
Surgery
New York, NY

Clint Rubin, PhD
SUNY Distinguished Professor and Chair of
Biomedical Engineering
Stony Brook University
Stony Brook, NY

Laura Santambrogio, MD, PhD
Professor of Pathology, Microbiology &
Immunology, and Orthopaedic Surgery
Albert Einstein College of Medicine
Bronx, NY

Mitchell B. Schaffler, PhD
CUNY and Wallace H. Coulter Distinguished
Professor of Biomedical Engineering
Chairman, Department of Biomedical
Engineering
The City College of New York
New York, NY

David C. Spray, PhD
Professor, Dominick P. Purpura Department of
Neuroscience and Department of Medicine
(Cardiology)
Albert Einstein College of Medicine and
Montefiore Medical Center
Bronx, NY

Sylvia O. Suadicani, PhD
Associate Professor of Urology
Assistant Professor, Dominick P. Purpura
Department of Neuroscience
Albert Einstein College of Medicine and
Montefiore Medical Center
Bronx, NY

Hui (Herb) B. Sun, PhD
Associate Professor of Orthopaedic Surgery
and Radiation Oncology
Director of Orthopaedic Research
Albert Einstein College of Medicine and
Montefiore Medical Center
Bronx, NY

Mia M. Thi, PhD
Assistant Professor of Orthopaedic Surgery
Instructor, Dominick P. Purpura Department of
Neuroscience
Albert Einstein College of Medicine
Montefiore Medical Center
Bronx, NY

Deepak Vashishth, PhD
Director, Center for Biotechnology and
Interdisciplinary Studies
Professor of Biomedical Engineering,
Rensselaer Polytechnic Institute
Troy, NY
CONTACT INFORMATION
Herb B. Sun, PhD
Program Director
Email: herb.sun@einstein.yu.edu
P: 718-430-4291
F: 718-430-3259

Mia M. Thi, PhD
Chair, Poster Session and Young Investigator Award Committee
Email: mia.thi@einstein.yu.edu
P: 718-430-3460

Rhomina Carrasco
Symposium Coordinator
Email: rhomina.carrasco@einstein.yu.edu
P: 718-430-2911

Symposium Location
Albert Einstein College of Medicine
Michael F. Price Center and Harold and Muriel Block Research Pavilion
1301 Morris Park Avenue, Bronx, NY 10461
Directions: http://www.einstein.yu.edu/visitors/

HOTEL INFORMATION
Residence Inn by Marriott
The Bronx at Metro Center Atrium
1776 Eastchester Road, Bronx, NY 10461
The hotel is a 10 minute walk from the Symposium.
www.marriott.com/nycbx
P: 718-239-3939

PARKING INFORMATION
The PF Parking lot
1975 Eastchester Road
Bronx, NY 10461
http://einstein.pfparking.org/location.php

Site Map
- 17 Price Center
- 9 Lubin Hall
- P Parking