Arnold and Madaleine Penner
9th Annual Musculoskeletal Repair and Regeneration Symposium Virtual Event
Thursday, October 8, 2020

Presented by: Musculoskeletal and Orthopaedic Research Laboratories and Department of Orthopaedic Surgery at Einstein College of Medicine and Montefiore Medical Center
Program Director: Mia M. Thi, PhD
University Chairman: Neil J. Cobelli, MD
9th Annual Musculoskeletal Repair and Regeneration Symposium – Virtual Event
Thursday, October 8, 2020

SYMPOSIUM MISSION

The Albert Einstein College of Medicine and Montefiore Medical Center Musculoskeletal Repair and Regeneration Symposium continues to seek and 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:

• New insights in bone
• Tissue engineering and regenerative medicine
• Tendon and ligament regenerative healing
• Advances in musculoskeletal diseases

GOALS AND FEATURES

This program attempts to address current issues in musculoskeletal repair and regeneration, and disease treatment. The presentations and discussions will focus on up-to-date scientific discoveries and the potential impact of these findings on patient treatment and management in the future. This meeting features:

• 8 outstanding speakers from the United States and Europe
• Lightening e-poster session and Young Investigator Award session

REGISTRATION

Deadline: October 5, 2019

Please register online at:
http://einstein.yu.edu/departments/orthopaedic-surgery/symposium/registration/
Registration is free. Early registration is highly recommended.
An email with the information to virtually join the meeting will be sent to the registrants’ email prior to meeting. Please note that only those who registered will be granted access.

CALL FOR ABSTRACTS FOR POSTER SESSION AND YOUNG INVESTIGATOR AND CLINICAL YOUNG INVESTIGATOR AWARDS

We invite investigators to submit abstracts for the virtual lightening e-poster session, which is
Abstracts from graduate and medical students, residents and postdoctoral fellows will be considered for Young Investigator Awards and Clinical Young Investigator Award. Four winners, three from Young Investigator category and one from Clinical Young Investigator category will be announced and each will be presented with a prize and a plaque. To qualify, you must register and submit an abstract to Dr. Zeynep Seref-Ferlengez, the chair of the Poster Session and Young Investigator Award committee, by September 11, 2020 via email to: sereffer@montefiore.org.

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 template on the website. As the Symposium aims to promote communication within our region, we encourage you to submit your recent work (within 2020) to this Symposium, including work that may have been submitted to other meetings. Please note: Two PowerPoint slides with 2 minutes audio must be submitted for all accepted posters by October 2, 2020.

PROGRAM DIRECTOR
Mia M. Thi, PhD

STEERING COMMITTEE CHAIRS
• Alesha Castillo, PhD
• James Iatridis, PhD
• Woojin Han, PhD
• David Corr, PhD
• Lionel Ivashkiv, MD
• Bang Hoang, MD

PROGRAM OVERSEEERS
• Michael Detamore, PhD
• Susannah Fritton, PhD
• Mary Goldring, PhD
• Steven Goldring, MD
• Ed Guo, PhD
• John Hardin, MD
• David Hirsh, MD
• James Iatridis, PhD
• Lionel Ivashkiv, MD
• Thorsten Kirsch, PhD
• Catherine Kuo, PhD
• Chuanju Liu, PhD
• Helen Lu, PhD
• Jeremy Mao, DDS, PhD
• Steven Nicoll, PhD
• Maurizio Pacifici, PhD
• Nicola Patridge, PhD
• Clinton Rubin, PhD
• Yi-Xian Qin, PhD
• Mitchell Schaffler, PhD
• David Spray, PhD
• Stavros Thomopoulos, PhD

e-POSTER SESSION AND YOUNG INVESTIGATOR AWARD COMMITTEE
Chair: Zeynep Seref-Ferlengez, PhD

Co-chairs
• Ugur Ayturk, PhD
• David Corr, PhD
• X. Edward Guo, PhD
• Regina Hanstein, PhD
• David Hirsh, MD
• Bang Hoang, PhD
• Robert Majeska, PhD
• Jeremy Mao, DDS, PhD
• Yi-Xian Qin, PhD
• Sylvia Suadicani, PhD
AGENDA

8:00 – 8:10 am  Introduction and acknowledgements
Mia M. Thi, PhD
Opening remarks
Neil J. Cobelli, MD

Session 1 – New insights in bone
Steering chair: Alesha Castillo, PhD

8:10 – 8:15 am  Introduction
Alesha Castillo, PhD
New York University

8:15 – 8:35 am  Skeletal Stem and Progenitor Cells (SSPCs) in Bone Growth, Homeostasis and Repair
Christa Maes, PhD
KU Leuven, Belgium

8:35 – 8:55 am  Bone Mechanotransduction - Checks and Balances
Karl Lewis, PhD
Cornell University

8:55 – 9:05 am  Discussion / Conclusions

9:05 – 9:15 am BREAK

Session 2 – Tissue engineering and regenerative medicine
Steering chair: James Iatridis, PhD, co-chair: Woojin Han, PhD

9:15 – 9:20 am  Introduction
James Iatridis, PhD
Icahn School of Medicine at Mount Sinai

9:20 – 9:40 am  Spatially functionalized biomaterials to direct osteochondral tissue regeneration
Lesley W. Chow, PhD
Lehigh University

9:40 – 10:00 am  Synthetic designer matrices for skeletal muscle stem cell transplantation
Woojin Han, PhD
Georgia Institute of Technology, Icahn School of Medicine at Mount Sinai

10:00 – 10:10 am  Discussion / Conclusions
Session 3 – Tendon and ligament regenerative healing
Steering chair: David Corr, PhD

10:20 – 10:25 pm
Introduction
David Corr, PhD
Rensselaer Polytechnic Institute

10:25 – 10:45 pm
Immune modulation of tendon and ligament healing
Connie Chamberlain, PhD
UW-Madison

10:45 – 11:05 am
Fiber-based Models of Soft Tissue Healing
Helen Lu, PhD
Columbia University

11:05 – 11:15 am
Discussion / Conclusions

11:15 – 11:25 am BREAK

11:25 – 12:45 pm
Concurrent lightening e-poster sessions

12:45 – 12:55 pm BREAK

Session 4 – Advances in musculoskeletal diseases
Steering chair: Lionel Ivashkiv, MD; co-chair: Bang Hoang, MD

12:55 – 1:00 pm
Introduction
Lionel Ivashkiv, MD
The Hospital for Special Surgery, Weill Cornell Medical College

1:00 – 1:20 pm
Epigenomic Changes Accompanying the Progression of Surgically Induced Osteoarthritis
Miguel Otero, PhD
The Hospital for Special Surgery

1:20 – 1:40 pm
Protecting patients from Infection: Optimizing patients, implants, and our environment.
Nicholas M. Bernthal, MD
David Geffen School of Medicine, UCLA

1:40 – 1:50 pm
Discussion / Conclusions
1:50 – 2:00 pm  BREAK

Young Investigator Awards
Chair: Zeynep Seref-Ferlengez, PhD

2:00 – 2:10 pm  Young Investigator Awards
Hosted by: Young Investigator Award Committee

Closing Remarks

2:10 pm  Closing remarks
Neil J. Cobelli, MD
Arnold and Madaleine Penner
8th Annual Musculoskeletal Repair and Regeneration Symposium
Thursday, October 3, 2018

Chairs, Co-Chairs, and Speakers

Ugur Ayturk, PhD
Assistant Scientist of Musculoskeletal Integrity Program,
Hospital for Special Surgery
New York, NY

Nicholas M. Bernthal, MD, FAOA
Associate Professor
Chief, Division of Musculoskeletal Oncology
Director, UCLA Global Orthopaedic Initiative
Department of Orthopaedic Surgery
David Geffen School of Medicine at UCLA
Los Angeles, CA

Alesha Castillo
Assistant Professor of Biomedical Engineering, and
Orthopaedic Surgery
New York University
New York, NY

Lesley W. Chow, PhD
Assistant Professor of Bioengineering
Materials Science & Engineering
Lehigh University
Bethlehem, PA

Connie Chamberlain, PhD
Associate Scientist of Orthopedics and Rehabilitation
School of medicine and Public Health
University of Wisconsin-Madison.
Madison, WI

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

David T. Corr, PhD
Associate Professor of Biomedical Engineering
Rensselaer Polytechnic Institute
Troy, NY

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

Woojin Han, PhD
Assistant Professor of Orthopaedics,
Icahn School of Medicine at Mount Sinai
NIH NRSA Postdoctoral Fellow,
Parker H. Petit Institute for Bioengineering and Bioscience
Georgia Institute of Technology
Atlanta, GA

Regina Hanstein, PhD
Research Assistant Professor of 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 and Montefiore Medical Center
Bronx, NY

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

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

Lionel Ivashkiv, MD.
Chief Scientific Officer, Director of HSS Genomics Center
Richard L. Menschel Research Chair
David H. Koch Chair in Arthritis and Tissue Degeneration
Professor of Medicine and Immunology
Weill Cornell Medicine, Hospital for Special Surgery
New York, NY

Karl Lewis, PhD
Assistant Professor of Biomedical Engineering
Meinig School of Biomedical Engineering
Cornell University
Ithaca, NY
Helen Lu, PhD
Professor and Vice Chair of Biomedical Engineering
Columbia University
New York, NY

Christa Maes, PhD
Professor of Development and Regeneration
Laboratory for Skeletal Cell Biology and Physiology
Skeletal Biology and Engineering Research Center
KU Leuven, Belgium

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

Jeremy J. Mao, DDS, PhD
Edwin S. Robinson Professor of Dentistry (in Orthopaedic Surgery, Pathology and Cell biology)
College of Dental Medicine, Columbia University
New York, NY

Miguel Otero, PhD
Assistant Scientist of Tissue Engineering Regeneration and Repair Program
Co-Director, Derfner Foundation Precision Medicine Laboratory
Hospital for Special Surgery
New York, NY

Yi-Xian Qin, PhD
Professor of Biomedical Engineering
Director, Orthopaedic Bioengineering Research Laboratory
Associate Dean for Academic Affairs and Int'l Programs, College of Engineering and Applied Sciences
State University of New York at Stony Brook
Stony Brook, NY

Zeynep Seref-Ferlengez, PhD
Research Assistant Professor of Orthopaedic Surgery
Albert Einstein College of Medicine and Montefiore Medical Center
Bronx, NY

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

Mia M. Thi, PhD
Associate Professor of Orthopaedic Surgery
Instructor of Neuroscience
Albert Einstein College of Medicine and Montefiore Medical Center
Bronx, NY
CONTACT INFORMATION

Mia M. Thi, PhD
Program Director
Email: mia.thi@einsteinmed.org
P: 718-430-3460

Zeynep Seref-Ferlengez, PhD
Chair, Poster Session and Young Investigator Award Committee
Email: sereffer@montefiore.org
P: 929-246-6352

Rhomina Carrasco
Symposium Coordinator
Email: rhomina.carrasco@einsteinmed.org
P: 718-430-2911