Program

7:30 am - 8:45 am

2nd Floor, 433 1st Ave

Registration and Breakfast

8:45 am - 9:00 am

Room 230, 433 1st Ave

Opening Remarks

Thorsten Kirsch, PhD

Professor and Vice Chair of Research, Orthopaedic Surgery

Director, Musculoskeletal Research Center

NYU School of Medicine

9:00 am - 10:30 am

Room 230, 433 1st Ave

Tendon/Spine Regeneration Session

(chaired by Thorsten Kirsch, PhD)

'Regulation of tendon regeneration'

Alice Huang, PhD
Associate Professor
Department of Orthopaedics
Icahn School of Medicine at Mount Sinai

'Mechanobiology of tenogenesis'

Catherine K. Kuo, PhD
Associate Professor
Department of Biomedical Engineering
Department of Orthopaedics
Center for Musculoskeletal Research
University of Rochester Medical Center

'Evolutionary conservation of the notochord genetic toolkit across chordates.'

Anna Di Gregorio, PhD 2018 CSCB Pilot Grant Awardee Associate Professor Department of Basic Science and Craniofacial Biology NYU College of Dentistry

'Nonviral transfection of human intervertebral disc cells with transcription factors induces reprogramming to a healthy anti-catabolic/inflammatory phenotype with enhanced extracellular matrix accumulation'

Nina Tang
Graduate Student
Department of Biomedical Engineering
Ohio State University

10:30 am - 10:45 am

2nd Floor Atrium, 433 1st Ave

Coffee Break

10:45 am – 12:00 pm

Room 230, 433 1st Ave

Stem Cells, Fat, and Bone Session

(chaired by Nicola Partridge, PhD)

'Sclerostin's effects on adipose and bone'

Michaela Reagan, PhD
Assistant Professor
Tufts University Sackler School of Graduate Biomedical Sciences
Faculty Scientist
Maine Medical Center Research Institute

'Quantitative MRI of bone microarchitecture and marrow fat composition'

Gregory Chang, MD, MBA Associate Professor Department of Radiology NYU School of Medicine

'Impaired hard tissue morphology and mineral density in Type-1 diabetes'

Yanjiao Zhang, MS
Visiting Researcher
Department of Basic Science and Craniofacial Biology
NYU College of Dentistry

12:00 pm – 1:15 pm

Rooms 260,262, 264, and 2nd Floor Atrium, 433 1st Ave

Poster Session and Lunch (sponsored by NYU Dental Professional Development)

1:15 pm – 2:00 pm

Rooms 230, 433 1st Ave

Young Investigators Session (sponsored by the Orthopaedic Research Society) (chaired by Philipp Leucht, MD, PhD & Olivia Torrre, PhD)

'Bone marrow multipotent stromal cell derived exosomes attenuate pathologic diabetic wound healing by promoting angiogenesis'

Joseph Kuhn, LPN, MD

Research Fellow

Hansjörg Wyss Department of Plastic Surgery
NYU School of Medicine

'Defining fibrocartilage stem cells critical for TMJ development and disease'

Angela Ruscitto, PhD

Postdoctoral Research Scientist

Department of Orthodontics

Columbia University College of Dental Medicine

'Osteocyte oxidative stress following estrogen loss, microdamage and disuse'

Dorra Frikha-Benayed, PhD

Postdoctoral Research Fellow

Department of Biomedical Engineering, Grove School of Engineering

City College of New York, City University of New York

2:00 pm – 3:15 pm

Room 230, 433 1st Ave

Microbiome and Bone Session

(chaired by Xin Li, PhD)

'The gut microbiome and bone health'

Julia Charles, MD/PhD

Assistant Professor

Departments of Orthopedics and Medicine

Brigham and Women's Hospital, Harvard Medical School

'The microbiome and orthopaedic disorders'

Christopher Hernandez, PhD
Associate Professor
Meinig School of Biomedical Engineering
Sibley School of Mechanical and Aerospace Engineering
Cornell University College of Engineering

'Fungal (mycobiome) perturbations in necrotic tissues of MRONJ patients'

Smruti Pushalkar, PhD 2018 CSCB Pilot Grant Awardee Adjunct Assistant Professor and Research Scientist Department of Basic Science and Craniofacial Biology NYU College of Dentistry

3:15 pm - 3:30 pm

2nd Floor Atrium, 433 1st Ave

Coffee Break

Osteoarthritis Session

(chaired by Mukundan Attur, PhD)

'Drug based modulation of endogenous fibrocartilage stem cells to treat TMJ osteoarthritis'

Mildred Embree, MS, DMD, PhD

Dr. Edwin S. Robinson Assistant Professor of Dental Medicine

Department of Orthodontics

Columbia University College of Dental Medicine

'Changes in DNA methylation contribute to the phenotypic instability of chondrocytes in osteoarthritis'

Miguel Otero, PhD

Assistant Scientist

Orthopedic Soft Tissue Research Program

Co-Director

Derfner Foundation Precision Medicine Laboratory

Hospital for Special Surgery

'Adenosine A2A receptor (A2AR) stimulation enhances mitochondrial metabolism and mitigates reactive oxygen species-mediated mitochondrial injury'

Cristina Castro
MD/PhD Candidate
NYU School of Medicine

4:45 pm - 5:00 pm

Room 230, 433 1st Ave

Conclusions and Thank You

Conclusions
Nicola Partridge, PhD
Founding Director
NYU Center for Skeletal & Craniofacial Biology
Professor
Basic Science & Craniofacial Biology
NYU College of Dentistry

5:00 pm - 6:00 pm

2nd Floor Atrium, 433 1st Ave

Reception and Award Presentations

A networking event with hors d'oeuvres, wine, and beer