



8th Annual CMSR Symposium

Wednesday, October 24, 2018 • Adolph Auditorium & Saunders Research Building Atrium

8:30 a.m. Welcome & Introduction

Hani Awad, Ph.D.
Paul Rubery, M.D.

***Pre-Doctoral
Rosier Award
Presentations***
Adolph Auditorium

8:40 a.m. Sustained Delivery of Antimicrobials from 3D-Printed CaP Scaffolds in a Single-Stage Revision of Osteomyelitis with Hardware Exchange Abrogates *S. Aureus* Infections and Promotes Bone Formation in Mice

Ryan Trombetta
(Awad Lab)

8:55 a.m. S100a4-Lineage Cells Lose S100a4 Expression to Become α -SMA+ Myofibroblasts During Scar-Mediated Tendon Healing

Jessica Ackerman
(Loiselle Lab)

9:10 a.m. Targeted Nanoparticle Delivery of Maraviroc to Normalize the Leukemic Bone Marrow Microenvironment

Marian Ackun-Farmmer
(Benoit Lab)

9:25 a.m. Microbiome Analysis for Assessment of Treatment Response and Salvage Prognosis in Infected Diabetic Foot Ulcers

James Brodell, Jr.
(Schwarz Lab)

10:00 a.m. Poster Session in the Saunders Research Building (SRB) Atrium

***Post-Doctoral
Rosier Award
Presentations***
Adolph Auditorium

1:00 p.m. The Effects of Targeted deletion of PTH1R via SMA Cre-ERT2 in Cranial Bone Defect Repair

Yuankun Zhai, Ph.D.
(Zhang Lab)

1:15 p.m. Engineered Salivary Gland Tissue Chips

Yuanhui Song, Ph.D.
(Benoit Lab)

***Plenary
Lectures***
Adolph Auditorium

1:30 p.m. Chondrocyte Mechanotransduction: Target Piezo1 for Knee Joint Inflammation and OA



Whasil Lee, Ph.D.
Biomedical Engineering

2:00 p.m. Nanofiber-Enabled Engineering of Biomimetic Periosteum for Bone Repair and Reconstruction



Xinping Zhang, B.Med., Ph.D.
Orthopaedics

2:30 p.m. TRAF3, a Multifunctional Protein Regulating Bone Turnover and More



Brendan Boyce, M.B.Ch.B.
Pathology

3:15 p.m. Artificial Intelligence, Ultrasound and Infections



Constantinos Ketonis, M.D., Ph.D.
Orthopaedics

3:45 p.m. A Multiscale Mechanical Model of Articular Cartilage based on New Insights into the Compressibility of Isolated Chondrocytes



Mark Buckley, Ph.D.
Biomedical Engineering

4:15 p.m. The Gut Microbiome: An Endocrine Regulator of the Musculoskeletal System



Michael Zuscik, Ph.D.
UC Denver Orthopaedics