Fifth Annual CMSR Symposium
September 23, 2015 • Flaum Atrium and Class of ’62 Auditorium

Rosier Award Finalist Presentations
Class of ’62 Auditorium

8:55 a.m. Welcome & Introduction 
Michael Zuscik, PhD

9:00 a.m. The Role of Neutrophils in B Cell Dysregulation in Systemic Lupus Erythematosus
Anna Bird (Anolik Lab)

9:15 a.m. Radiation Injury Links Mineral Homeostasis to Hematopoietic Stem Cell Niche Activation 
Corey Hoffman (Calvi Lab)

9:30 a.m. Free Fatty Acid-Induced TLR4 Activation in the Synovium is a Potential Mechanism for the Increased Susceptibility to OA in the Obese/T2D Population
Eric Schott (Mooney/Zuscik Lab)

9:45 a.m. 3D-printing of Biphasic Calcium Phosphate Bone Graft Substitutes with Incorporated Demineralized Bone Matrix 
Ryan Trombetta (Awad Lab)

10:00 a.m. Delivery of β-Catenin Agonists via Targeted Poly(styrene-alt-maleic anhydride)-b-poly(styrene) (PSMA-b-PS) Micelles to Enhance Fracture Healing 
Yuchen Wang (Benoit lab)

10:15 a.m. Antibodies Secreted by Circulating Plasmablasts: A New Biomarker for Early Diagnosis of Acute Orthopaedic Implant-associated Infections by Staphylococcus aureus
Sandeep Soin, MD (Schwarz/Daiss Lab)

10:30 a.m. B Cells Contribute to Bone Erosion in Rheumatoid Arthritis by Directly Inhibiting Osteoblast Differentiation
Wen Sun, PhD (Xing Lab)

10:45 a.m. Pharmacological Approaches to Preventing Muscle Degeneration after Motor Nerve Injury 
Li Yue, PhD (Elfar lab)

11:00 a.m. Poster Session in the Flaum Atrium

Plenary Lectures
Class of ’62 Auditorium

1:30 p.m. Embryonically Inspired Mechanoregulation of Stem Cell Terogenesis
Catherine Kuo, PhD

2:00 p.m. Energy Metabolism in Mesenchymal Stem Cells and Bone Homeostasis
Roman Eliseev, PhD

2:30 p.m. Development of a Directed Network to Define Sequential Interactions During Osteoblastogenesis: How to Make an Osteoblast in 4000 Easy Steps
Cheryl Ackert-Bicknell, PhD

3:15 p.m. Bone Marrow Stromal Cells (a.k.a. “Mesenchymal Stem Cells”) in Health and Disease
Pamela Gehron Robey, PhD

Dr. Robey is an internationally recognized leader in the stem cell biology field with specific focus on the biology of stem cells in bone, dental and connective tissue and their use in tissue regeneration applications. Dr. Robey is the Chief of the Craniofacial and Skeletal Diseases Branch, and Chief of the Skeletal Biology Section at NIH/NIDCR Division of Intramural Research. Dr. Robey is also the Co-Coordinator of the NIH Bone Marrow Stromal Cell Transplantation Center, and Acting Scientific Director of the NIH Stem Cell Unit.