Fourth Annual CMSR Symposium
September 10, 2014 • Flaum Atrium and Class of ’62 Auditorium

Trainee Presentations
Class of ’62 Auditorium

8:25 a.m. Welcome & Introduction
Michael Zuscik, PhD

8:30 a.m. Development and In Vitro Assessment of Enzymatically-responsive poly(ethylene glycol) Hydrogels for the Delivery of Therapeutic Peptides
Amy Van Hove

8:45 a.m. A Therapeutic Approach for the Treatment of Peripheral Nerve Crush Injury Using Slow-Release 4-Aminopyridine (4-AP)
Chris Tseng

9:00 a.m. Depletion of Stem Cells Leads to Loss of Strength Not Size in Neurogenic Atrophied Skeletal Muscle
Wenxuan Liu

9:15 a.m. EP1 Deletion Enhances Mitochondrial Activity in Mesenchymal Stem Cells and Promotes Osteogenicity
Marina Feigenson

9:30 a.m. Jagged1 Maintains Bone Homeostasis by Regulating Osteolineage Differentiation
Bisi Lawal

9:45 a.m. Multiplex Analysis of Serum IgG Against 14 S. aureus Antigens Identifies an Evolutionarily Conserved Host Response and Humoral Immunity Against IsdA and IsdB as Virulence Factors Associated with Death in Patients with S. aureus Deep Musculoskeletal Infection
Kohei Nishitani, MD PhD

10:00 a.m. Anti-Autolysin Monoclonal Antibodies as a Passive Immunization Against Methicillin-Resistant Staphylococcus aureus (MRSA) Implant-associated Osteomyelitis
Sheila Bello-Irizarry, PhD

10:15 a.m. Exposure of MSCs to Methacrylate-Based Polymerizations Increases Cellular ROS and Reduces Differentiation Capacity
Michael Hoffman, PhD

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

Plenary Lectures
Class of ’62 Auditorium

1:00 p.m. In Vivo & In Vitro Evaluation of the Role of Mechanics in Musculoskeletal Diseases
Mark Buckley, PhD

1:40 p.m. Comparative Aspects of Osteosarcoma: The Translational Bridge
Nicole Ehrhart, VMD

2:20 p.m. The Gold Standard for Geriatric Fracture Care: The Rochester Model
Stephen Kates, MD

Keynote Presentation
Class of ’62 Auditorium

3:15 p.m. Alternative Bearing Surfaces for Total Joint Replacement
Timothy Wright, PhD

Dr. Timothy Wright is an internationally renowned expert in orthopaedic biomechanics and biomaterials. Dr. Wright is the F.M. Kirby Chair of Orthopaedic Biomechanics & Senior Scientist at Hospital for Special Surgery, Professor of Applied Biomechanics at Weill Medical College of Cornell University, Member of the Biomedical Engineering program at Cornell University, Program Director of a Ruth L. Kirschstein T32 Training Program in Musculoskeletal Science, and Coordinating Director of the NIH-funded Weill Cornell Clinical and Translational Science Center.