Platform Session – Fri – 1  ·  8:00am – 9:30am

9:00AM
Yu Ling Huang, “Roles of Interstitial Flows in Breast Cancer Cell Invasion Using a 3D Microfluidic Model”
Track: Cancer Technologies, Nano and Micro Technologies  ·  OP-Fri-1-2-Room Auditorium 2  ·  3D Microfluidic Cancer Models

9:15AM
FNU Apoorva, “Role of Lymphatic-Mimicking Small-Scale Fluid Shear Stress on Survival, Integrin Signaling, and Drug Response in Aggressive Human Lymphoid Tumors”
Track: Cancer Technologies, Nano and Micro Technologies  ·  OP-Fri-1-2-Room Auditorium 2  ·  3D Microfluidic Cancer Models

9:15AM
Xuan Cao, “A Bio-chemo-mechanical Model for Nuclear Mechanics During Cell Transmigration”
Track: Biomechanics, Bioinformatics, Computational and Systems Biology  ·  OP-Fri-1-15-Room 200C  ·  Computational and Multiscale Modeling in Biomechanics I

9:15AM
Erik Zavrel, “Clinical Validation of a New Consumer Sleep Monitoring Device”
Track: Device Technologies and Biomedical Robotics  ·  OP-Fri-1-17-Room 200B  ·  Wearable Sensors and Devices

Platform Session – Fri – 2  ·  1:45pm – 3:15pm

1:45PM
Rebecca Bell, “Mechanotransduction Exercise Increases the Population of Myofibroblasts and Enhances the Pericellular Matrix in Fatigue Damaged Tendons”
Track: Cellular and Molecular Bioengineering, Biomechanics  ·  OP-Fri-2-1-Room Auditorium 1

1:45PM
Minglin Ma, “Drug-Eluting Conformal Coatings on Individual Cells” — INVITED
Track: Cellular and Molecular Bioengineering  ·  OP-Fri-2-12-Room 200F  ·  CMBE Young Innovators I

1:45PM
Terence Gee, “Role of Proinflammatory NFkB Signaling in Regulating Aortic Valve Calcific Potential”
Track: Cardiovascular Engineering  ·  OP-Fri-2-19-Room 200J  ·  Heart Valve Structure, Function and Disease I

2:15PM
Track: Bioinformatics, Computational and Systems Biology  ·  OP-Fri-2-13-Room 200D  ·  Single-Cell Measurements and Models

2:30PM
Zhexun Sun, “Design and Synthesis of Di-Block Copolymer for Boundary Lubrication of Articular Cartilage”
Track: Biomaterials  ·  OP-Fri-2-10-Room 101E  ·  Natural and Bioinspired Materials I

2:45PM
Francois Bordeleau, “Keratin 8/18 Regulation of Collective Epithelial Cell Contractility”
Track: Cellular and Molecular Bioengineering, Biomechanics  ·  OP-Fri-2-1-Room Auditorium 1  ·  Mechanotransduction

3:00PM
Michael Mitchell, “Serum Albumin Controls Charge-Mediated Adhesion and Isolation of Cancer Cells and Leukocytes Under Flow”
Track: Biomaterials  ·  OP-Fri-2-5-Room 102C  ·  Biomaterials for Immunoengineering II

3:00PM
Jan Lammerding, “Nuclear Rupture and Mechanics during Cancer Cell Migration in Confined Environments” — INVITED
Track: Cancer Technologies, Biomechanics  ·  OP-Fri-2-7-Room 101B  ·  Cancer Mechanobiology I

Platform Session – Fri – 3  ·  4:00pm – 5:30pm

4:00PM
Thong Cao, “Stabilization of the Hinge Region in Human E-selectin Enhances Binding Affinity to Ligands Under Force” — INVITED
Track: Cellular and Molecular Bioengineering  ·  OP-Fri-3-6-Room 101A  ·  Adhesion to the Vascular Endothelium