

Biophysical Society 68th Annual Meeting
Mechanobiology Subgroup Symposium
Saturday February 10, 2024
Philadelphia, Pennsylvania

Subgroup Chair: Patricia Bassereau, Institut Curie, France

Symposium Time: 8:30 AM - 12:30 PM EST

Subgroup Business Meeting: 10:25 AM

Symposium Room: 113C

8:30 AM Opening Remarks

8:35 AM Shamik Sen, Indian Institute of Technology Bombay, India
Proteolytic and Non-Proteolytic Functions of MMP9 in Cancer Invasion

9:00 AM Rafael Tapia Rojo, Kings College, London, UK
Mechanochemical Regulation of the Talin-Vinculin Interaction

9:25 AM Student/Postdoc Talk: Qin Ni
Deciphering the Role of Hydrostatic Pressure in Cellular Functions and Behaviors

9:35 AM Allen Ehrlicher, McGill University, Canada
Nuclear Mechanics and Deformation Regulate Cellular Lineage and Senescence via YAP Mechanotransduction

10:00 AM Rebecca Wells, University of Pennsylvania, USA
Lipid Droplets with Varied Mechanical Properties as Mechanical Stressors in Steatotic Liver Disease

10:25 AM Subgroup Business Meeting

10:40 AM Allen Liu, University of Michigan, USA
Mechanobiology of Collective Cell Migration

11:05 AM Student/Postdoc Talk: Xuechen Shi
Compression Stiffening in Adipose Tissues

11:15 AM Margaret Gardel, University of Chicago, USA
How Adherent Cells Process Mechanical Information?

11:40 AM Orion Weiner, University of California, San Francisco, USA
Membrane Tension as a Long-Range Integrator of Immune Cell Physiology

12:05 PM Viola Vogel, ETH Zürich, Switzerland
Mechanobiology of Extracellular Matrix Fibers: From Blood Clots to Healthy and Diseased Organs

12:30 PM Closing Remarks

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