Mechanobiology Subgroup 2020 Symposium San Diego, California San Diego Convention Center Rooms: 30 ABC Symposium Time: 8:30 AM - 12:30 PM Subgroup Chair: Xavier Trepat, IBEC Barcelona, Spain

8:35 AM Adam J. Engler, University of California, San Diego

Understanding and Exploiting Cancer Mechanobiology

9:05 AM Jennifer A. Zallen, Sloan Kettering Institute

Signals, Forces, and Cells: Decoding Tissue Morphogenesis

9:35 AM Carsten Grashoff, Institute of Molecular Cell Biology, WMU Münster, Germany

Piconewton-Sensitive Biosensors to Investigate Adhesion Mechanics in Cells

10:05 AM Saradha Venkatachalapathy, Mechanobiology Institute, National University of Singapore

Cell Geometry Modulates the Activation of Fibroblasts in 3D Tumor Microenvironments

10:20 AM Mihai-Adrian Bodescu, Technical University of Munich, Germany

Single-Molecule Mechanics of the Talin-Integrin Bond

11:00 AM Mechanobiology Award Presentation & Lecture: Yanlan Mao, MRC LCMB - University College London, UK

How to Get Into Shape and Stay in Shape - an in vivo and in silico Approach

11:30 AM Tai-De Li, City University of New York

Dynamics of Force-Regulated Branched Actin Network Density

11:45 AM Elevator Talks

Chad Hobson, University of North Carolina – Chapel Hill

A Side-View on Nuclear Mechanics: Combined Atomic Force Microscopy and Light Sheet Microscopy Inform Chromatin's Role in Regulating Nuclear Morphology

Rikki M. Garner, Stanford University

Leading Edge Maintenance in Migrating Neutrophil-Like Hl-60 Cells is an Emergent Property of Branched Actin Growth

Krishna Chaitanya Kasuba, ETH Zurich, Switzerland

Neuromechanics of Mammalian Cortical Neurons

12:00 PM Subgroup Business Meeting

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