

Frontiers in Mechanobiology Symposium

Mechanobiology Institute
National University of Singapore, Singapore
MBI Level 5 Seminar Room

Monday, 15 July, 2019

Time	Programme
0900-0905am	Opening Remarks
<i>Session I: Chaired by Chloe May Simpson</i>	
0905-0945am	Rong Li <i>Mechanobiology Institute, NUS, Singapore</i> Actin-based forces in asymmetric meiotic cell division
0945-1015am	Giorgio Scita <i>IFOM FIRIC Institute of Molecular Oncology, Italy</i> Solid-to-liquid phase transition in cancer progression
1015-1030am	Tee Yee Han (Bershadsky lab) <i>Mechanobiology Institute, NUS, Singapore</i> Actin polymerization and filament cross-linking determine chirality of individual cells and cell groups
1030-1045am	Ajay Sanjay Tijore (Sheetz lab) <i>Mechanobiology Institute, NUS, Singapore</i> Selective killing of Transformed Cells by Mechanical Stretch
1045-1105am	Coffee Break
<i>Session II: Chaired by Samuel Fardell Hastings Barnett</i>	
1105-1135am	Delphine Delacour <i>Université Paris Diderot, France</i> Spatio-temporal modulation of cortical RhoA zone drives epithelial actin organization
1135-1205pm	Boris Martinac <i>Victor Chang Cardiac Research Institute, Australia</i> Biophysical principles of ion channel mediated mechanosensory transduction
1205-1220pm	Zhang Shaobo (Saunders lab) <i>Mechanobiology Institute, NUS, Singapore</i> Myosin II Oscillation Provides Spatial-temporal Mechanical Proofreading Mechanism for Precise Cell Matching
1220-1235pm	Teng Xiang (Toyama lab) <i>Mechanobiology Institute, NUS, Singapore</i> Mechanical function of macrophages in apoptotic cell extrusion
1235-0130pm	Lunch

<i>Session III: Chaired by Kyle David Buchan</i>	
0130-0200pm	Benoît Ladoux Université Paris Diderot, France Emergence of cell polarity from molecular processes to collective cell organization.
0200-0230pm	Abdul Barakat Ecole Polytechnique, France Biophysical Regulation of Vascular Endothelial Cell Morphology and Migration
0230-0300pm	Yi-Chin Toh National University of Singapore, Singapore Engineering and visualizing multi-scale heterotypic cellular interactions
0300-0315pm	Aditya Arora (Viasnoff lab) Mechanobiology Institute, NUS, Singapore Deciphering the contribution of cadherin trans ligation during formation of adherens junction
0315-0330pm	Supatra Tharinee Marsh (CT Lim lab) Mechanobiology Institute, NUS, Singapore Bioengineering <i>in vitro</i> 3D Skin Models for Live-Cell Imaging
0330-0400pm	Coffee Break
<i>Session IV: Chaired by Aaron Joseph Farrugia</i>	
0400-0430pm	GV Shivashankar Mechanobiology Institute, NUS, Singapore Mechano-Genomics & Cell-Fate Decisions
0430-0500pm	Christine Siu-Ling Wong Nanyang Technological University, Singapore Programmed explosion of neutrophils: The cell biology of NET formation and the importance of PAD4
0500-0515pm	Moirangthem Kiran Singh (Kenney lab) Mechanobiology Institute, NUS, Singapore Labeling and visualization of Salmonella secreted effector SifA by genetic code expansion
0515-0530pm	Samuel Fardell Hastings Barnett (Kanchanawong lab) Mechanobiology Institute, NUS, Singapore Controllable cell mechanotransduction with chemical dimerisers
0530-0545pm	Yu Miao (Yan Jie lab) Mechanobiology Institute, NUS, Singapore Implementing Optogenetic Modulation in Mechanotransduction
0545-0600pm	Wong Chen Pei Darren (BC Low lab) Mechanobiology Institute, NUS, Singapore Rho regulation in cardiomyocyte differentiation
0600-0615pm	Zhao Peng (Motegi lab) National University of Singapore, Singapore Aurora-A Breaks Symmetry in Contractile Actomyosin Networks Independently of Its Role in Centrosome Maturation
0630pm	Dinner Reception