Biophysics Symposium

MECHANOBIOLOGY OF THE CYTOSKELETON: MOLECULAR AND CELLULAR PRINCIPLES

Tuesday, May 9th, 2017 1103 Bioscience Research Building, University of Maryland

9-9:30 am Refreshments and introductory remarks

9:30-10:10 am Actin retrograde flow actively aligns and orients

Clare Waterman, NIH ligand-enhanced integrins in focal adhesions.

10:10-10:30 am Physical guidance of cell migration Wolfgang Losert, UMD

10:30-10:50 am Break

10:50-11:30 am Cellular form: the basis of healthy function Doug Robinson, JHU

11:30-12:10 pm Compression stiffening of tissues and cells:
Paul Jamney, U Penn protective role of intermediate filaments

12:10-1:50 pm Lunch & poster session

1:50-2:30 pm *Vive la resistance! What the actin cytoskelet*on **Dan Fletcher**, UC Berkeley *teaches us about force*

2:30-2:50 pm Harnessing the force: mechanical modulation of Arpita Upadhyaya, UMD immune cell dynamics

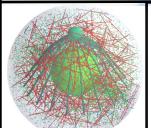
2:50-3:20 pm Break & Posters

3:20-3:40 pm Understanding the emergence of contractility in Garyk Papoian, UMD actomyosin networks

3:40-4:20 pm *Mechanical phase transitions and the elasticity of* **Fred Mackintosh**, Rice *intra- and extracellular matrices*

4:20-5:00 pm *Microtubules, motors and morphogenesis*Jonathan Howard, Yale

5-6 pm Reception



Presented by the Maryland Biophysics ProgramSupported by the Institute for Physical Science and Technology

Organizers: Arpita Upadhyaya, Garyk Papoian
For more information, and to submit posters please contact
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