**Mechanobiology**

Organized by Chwee Teck Lim

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**Introduction**

Mechanobiology  
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**Articles**

- Insights into the mechanisms of myosin and kinesin molecular motors from the single-molecule unbinding force measurements  
  S. V. Mikhailenko, Y. Oguchi & S. Ishiwata  
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- Mechanosensitivity of ion channels based on protein–lipid interactions  
  K. Yoshimura & M. Sokabe  
  S307

- Emergence of a prestressed eukaryotic nucleus during cellular differentiation and development  
  A. Mazumder & G. V. Shivashankar  
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- Biomechanical effects of environmental and engineered particles on human airway smooth muscle cells  
  P. Berntsen, C. Y. Park, B. Rotthen-Bublauer, A. Tiuala, T. M. Sager, R. M. Molina, T. C. Donaghey,  
  J. D. Brain, J. J. Fredberg, P. C. H. & E. H. Zhou  
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- Intercellular mechanotransduction during multicellular morphodynamics  
  J.-H. Kim, L. J. Dooling & A. R. Asthagiri  
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- Computational model of cell positioning: directed and collective migration in the intestinal crypt epithelium  
  S. Y. Wong, K.-H. Chiam, C. T. Lim & P. Matsuda  
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- Live cell imaging of mechanotransduction  
  B. Liu, T.-J. Kim & Y. Wang  
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