



# “Mechanics in Morphogenesis” POSTER COMPETITION

February 21, 2018

4:40-6:30 pm

Jadwin Hall, Room 407

Posters are listed alphabetically by authors' last name.

1. Abu Hamed, Mohammad; Technion; ***Dynamics of curved fronts in systems with power-law memory***
2. Adhyapok, Priyom; Indiana University Bloomington; ***Epithelialization at Forming Somite Boundaries***
3. Al Mosleh, Salem; UMass, Amherst; ***Growth of Form in Thin Elastic Structures***
4. Armon, Shahaf; Stanford University; ***Load minimization allows ultra-fast cellular contractions and “active cohesion” in the epithelium of *T. adhaerens****
5. Atia, Lior; Harvard; ***Geometric constraints during epithelial jamming***
6. Beroz, Farzan; Princeton University; ***Verticalization of *Vibrio cholerae* biofilms***
7. Blawdziewicz, Jerzy; TTU; ***Intercellular Coordination and Robustness via Mechanical Feedback during Ventral Furrow Formation in the *Drosophila* Embryo***
8. Bull, Matthew; Stanford University; ***The dynamics of multi-cellular coordination in a living fossil***
9. Chaudhary, Gaurav; University of Illinois at Urbana-Champaign; ***Concentration independent mechanics and structure of hagfish slime***
10. Cohen, Daniel; Princeton University; ***Bioelectric remote-control of tissue flows***
11. Dasbiswas, Kinjal; University of Chicago; ***Mechanogens: inducing cell mechanics with chemical gradients***
12. Engstrom, Tyler; Syracuse University; ***How does the little brain get its folds?***
13. Erdemci-Tandogan, Gonca; Syracuse University; ***Impact of cell dynamics and tissue rheology on the development of zebrafish left-right organizer***
14. Erzberger, Anna; Rockefeller University; ***Cytoskeletal mechanics of sensory hair cell rearrangements***

15. Goodwin, Katharine; Princeton University; ***Smooth muscle differentiation shapes domain branches in the developing mouse lung***
16. Grimes, Daniel; Princeton University; ***Keeping the spine straight: fluid flow and spine morphogenesis***
17. He, Xiuxiu; Georgia State University; ***The Shapes of Cell Migration***
18. Hsueh, Ching-chung; Academia Sinica, Taiwan; ***Laser Ablation on Madin-Darby Canine Kidney (MDCK) Cells to Study Apical Constriction***
19. Jacobo, Adrian; The Rockefeller University; ***Growth and patterning of the mammalian utricle***
20. Jaslove, Jacob; Princeton University; ***Mechanical Signals Promote Airway Smooth Muscle Differentiation in the Developing Mouse Lung***
21. Kaufman, Miron; Cleveland State University; ***Multifractal Dimensions in Microfluidics***
22. Khankhel, Aimal; University of California, Santa Barbara; ***Quantifying the total mechanical tractions within aggregates of cells using microsphere traction force microscopy (MTFM)***
23. Krajnc, Matej & Imran Alsous, Jasmin; Princeton University; ***The fruit fly embryo: a physics laboratory***
24. Kubitschke, Hans; University of Leipzig; ***Roadmap of Local Tumor Growth***
25. Merkel, Matthias; Syracuse University; ***A collective solid-fluid transition in confluent 3D tissues***
26. Mietke, Alexander; Max Planck Institute for the Physics of Complex Systems; ***Self-organisation of curved and deforming active surfaces***
27. Mitchel, Jennifer; Harvard T.H. Chan School of Public Health; ***The Unjamming Transition is Distinct from the Epithelial-to-Mesenchymal Transition***
28. Nagendra Prakash, Vivek; Stanford University; ***Tissue Fracture Dynamics governs Mechanics of Morphogenesis in a Simple, Early Divergent Metazoan***
29. Palmer, Michael; Princeton University; ***Branching of airway epithelium drives fusion in avian lung***
30. Patteson, Alison; University of Pennsylvania / Syracuse University; ***Loss of vimentin increases motility and nuclear damage in confined spaces***
31. Roth, Brad; Oakland University; ***A Mathematical Model of Mechanotransduction for Morphogenesis***
32. Sahu, Preeti; Syracuse University; ***The search for physical mechanism of cell sorting in bidisperse confluent tissue***
33. Sharma, Kharananda; Oakland University; ***The Mechanical Bidomain Model Applied to Engineered Tissue***
34. Wang, Shou-Wen; Princeton University; ***Adaptation unifies emergent oscillations in quorum sensing populations***
35. Wong, Felix; Harvard University; ***How bacteria pop***