Physical Sciences in
Oncology Center
PSOC@Penn

Spring 2017 Seminar Series

Towne 337 @ Noon



Jan 30th, 2017

lan Y. Wong, Ph.D.

"Tracking the Epithelial-Mesenchymal Transition in Engineered Microenvironments"

Assistant Professor of Engineering
Brown University
https://www.brown.edu/research/labs/wong/ian-wong



Feb 20th, 2017 Alex Mogilner, PHD

Simulation of mechanical strategies of 3D cell migration

Professor, Courant Institute and Department of Biology New York University

https://cims.nyu.edu/~mogilner/LabPage.html



March 9th, 2017

(Thursday / TOWNE 309 @ NOON)

Valerie Weaver, PhD

* Spatial-Mechanical Regulation of cell survival: Implications for Tumor Dormancy *

Professor & Director, Center for Bioengineering and Tissue Regeneration & Co- Director Bay Area Center for Physical Sciences and Oncology ,UCSF

http://cancer.ucsf.edu/people/profiles/weaver_valerie.3694



March 13th, 2017

Orly Alter, PhD

Cancer Diagnostics and Prognostics from Comparative Spectral Decompositions of Patient-Matched Genomic Profiles

Associate Professor, USTAR Associate Professor of Bioengineering and Human Genetics, Track in Computational Systems and Synthetic Bioengineering, University of Utah

https://www.sci.utah.edu/people/orly.html



March 20th, 2017 Peter N. Devreotes, PhD

Excitable Networks in Directed Cell Migration.

Director, Department of Cell Biology

Johns Hopkins University School of Medicine

http://cellbio.jhmi.edu/people/faculty/peter-n-devreotes-phd



March 27th, 2017

Xin Wei Wang, Ph.D

Liver cancer genomics and biology

Deputy Chief, Laboratory of Human Carcinogenesis

Senior Investigator & Head, Liver Carcinogenesis Section , NIH/NCI

https://ccr.cancer.gov/Laboratory-of-Human Carcinogenesis/xin-wei-wang



April 3rd, 2017

Jeffrey Fredberg, PhD

*The jamming transition, physical forces, and cell shape in the confluent epithelial cell layer *

Professor of Bioengineering and Physiology, Department of Environmental Health, Harvard University https://www.hsph.harvard.edu/jeffrey-fredberg/



April 10th,2017 Rotonya Carr, MD

Lipid droplet proteins in hepatic steatosis

Assistant Professor of Medicine at the Hospital of the University of Pennsylvania & Co-Director, Human Metabolic Tissue Resource, Institute of Diabetes, Obesity and Metabolism University of Pennsylvania



April 24th, 2017

Alissa Weaver, M.D., Ph.D.

Function of secreted exosomes in cancer cell migration and invasion

Associate Professor of Cancer Biology & Associate Professor of Cell and Developmental Biollogy , School of Medicine , Vanderbilt University

https://medschool.vanderbilt.edu/cdb/person/alissa-weaver-md-phd



May 8th, 2017 David Odde, PhD

Modeling and analysis of cell traction forces in mechanically compliant environments

Professor, Biomedical Engineering University of Minnesota http://bme.umn.edu/people/faculty/odde.html http://oddelab.umn.edu/



May 22nd, 2017 Ryan Petrie, PhD

* Pressure-driven cell motility in three-dimensional extracellular matrix *

Assistant Professor ,Department of Biology Drexel University http://drexel.edu/coas/faculty-research/faculty-directory/PetrieRyan/