

CENTER FOR SYSTEMS BIOLOGY
MCIRCC MICHIGAN CENTER FOR INTEGRATIVE
RESEARCH IN CRITICAL CARE
COMPLEX SYSTEMS

AGENDA for Wednesday September 14, 2016
BSRB Kahn Auditorium

Advancing Precision Medicine through Complex Systems Biology

- 08:30-09:00 am Registration and coffee/tea
- 09:00-09:15 am Welcome & introduction, Center Directors
- 09:15-10:00 am Kathryn Miller-Jensen, Yale University
"Single-cell secretion profiling for systems immunology"
- 10:05-10:30 am Kayvan Najarian, CSE, EECS UM
"Integration of Heterogeneous Patient Data for a Holistic Approach to Critical Care"
- 10:30-10:45am coffee/tea break*
- 10:45-11:30 am Sui Huang, Institute for Systems Biology
"Precision Despite Noise: critical state transitions in cell fate control- implications for cancer therapy and prediction in biomedicine"
- 11:40-12:05 Goncalo Abecasis, Chair, Biostatistics UM
"Michigan Genomics Initiative and Other Large Scale Genetics"
- 12:10-01:25 pm *Lunch- BSRB Seminar rooms A-C*
- 01:30-2:15 pm Shayne Pierce-Cotter, University of Virginia
"Exposing the secrets of tissue growth and remodeling by modeling cells as (secret) agents"
- 02:25-02:50 pm Dan Beard, Physiology UM
"Targeting mechano-energetic coupling to treat heart disease"
- 2:55-3:10pm coffee/tea break*
- 03:15-4:00 pm Yoram Vodovotz, Pittsburgh School of Medicine
"Computational Modeling in Critical Illness: From Data Deluge to Discovery"
- 4:05-4:30pm Greg Thurber, Chem E UM
"Systems Pharmacology of Complex Therapeutics: Connecting tissue, cellular, and subcellular events to drug response in tumors"
- 04:30-4:40 pm Summary and Discussion
- 04:45-5:45 pm Poster Session and Reception- Lobby of BSRB