



Poster Session Listing
Advancing Precision Medicine through Complex Systems Biology
Symposium 2016

- 1) Bharat Panwar*, Rajasree Menon, Ridvan Eksi, Hong-Dong Li, Gilbert S. Omenn, Yuanfang Guan, *Genome-wide functional annotations of human protein-coding splice variants*
- 2) Bruna Menezes*, Cornelius Cilliers, Greg M. Thurber, Jennifer J. Linderman, *A New Model to Study and Predict Better Drug Delivery to Breast Cancer*
- 3) Craig Biwer*, Heidi IgleyReger, Amy Rothberg, Charles Burant, Kayvan Najarian, *Persistent Homology: Predicting Individual Diet Efficacy*
- 4) Ehsan Mirzakhalili*, Eleni Gourgou, Bogdan Epureanu, *Neuronal Network Robustness: Where to Look for Synaptic Deficiencies in the Brain*
- 5) Elsje Pienaar*, Jansy Sarathy, Brendan Prideaux, Véronique Dartois, Denise E. Kirschner, Jennifer J. Linderman, *Systems Pharmacology Predicts Antibiotic Spatial Distribution And Efficacy In TB Granulomas*
- 6) Eric C. Hobson*, Joseph T. Decker, Lonnie D. Shea, Kelly B. Arnold, *Understanding Relationships Between Dynamic Intracellular Transcriptional Activity and Secreted Cytokines in the Pulmonary Immune Microenvironment*
- 7) Jason Karslake*, Jeff Maltas, Peter Brumm, Kevin B. Wood, *Population density modulates drug inhibition and gives rise to potential bistability of treatment outcomes for bacterial infections*
- 8) Joseph M. Cicchese*, Elsje Pienaar, Denise E. Kirschner, Jennifer J. Linderman, *Optimizing Tuberculosis Antibiotic Regimens Using a Computational Model of Granuloma Formation*
- 9) David N. O'Dwyer, Katy C. Norman*, Meng Xia, Stephen J. Gurczynski, Shanna L. Ashley, Ethan Grant, Eric S. White, Kevin J. Flaherty, Fernando J. Martinez, Susan Murray, Kelly B. Arnold, Bethany B. Moore, *The peripheral blood proteome signature of idiopathic pulmonary fibrosis is distinct from normal and is associated with novel immunological processes*
- 10) Kelsey Hallinen*, Kevin Wood, *Cooperation and Spatial Architecture in *E. faecalis* Biofilms*
- 11) Louis Joslyn*, Eileen Wong, JoAnne Flynn, Denise E. Kirschner, *Does Exhaustion Explain Low T-cell Functionality in the *Mycobacterium tuberculosis* Granuloma?*

- 12) Phillip Spinosa*, Kathy Luker, Gary Luker, Jennifer Linderman, *A Computational Model To Predict Chemokine Gradients and Cancer Cell Migration In The Tumor Microenvironment*
- 13) Rachel Lopez*, Françoise Van den Bergh, Daniel A. Beard, *Effects of Metabolic Remodeling on Mechanical Function in Heart Failure*
- 14) Sardar Ansari* ,Michael Heung, Kenn Oldham, Kevin Ward, Kayvan Najarian, *Noninvasive Vascular Tone Monitoring using a Polyvinylidene Fluoride Sensor to Detect Intradialytic Hypotension*
- 15) Somayeh Molaei* , Kelsey Horan ,Delaram Kahrobaei, Brahmajee Nallamothu, Kayvan Najarian, *Fully Automated Segmentation of Left Ventricle Using Deep Convolutional Neural Network on MRI*
- 16) Wen Yu*, Kelsey Hallinen, Kevin B. Wood, *Subinhibitory concentrations of β -lactam promote biofilm formation and modulate 3D architecture of *E. faecalis* communities*
- 17) Xinyu Tan*, Allen Liu, *The Role of Clathrin-mediated Endocytosis in Neutrophil Polarization*
- 18) Ziah Dean*, Kevin Wood, *Role of Antibiotic Interactions in Modulating *E. Faecalis* Resistance Evolution*
- 19) Christopher J. Miles*, Charles R. Doering, Oliver D. Kripfgans, *Nucleation pressure threshold in acoustic droplet vaporization*
- 20) S.M. Reza Soroushmehr, Craig Williamson, Kevin R. Ward, Kayvan Najarian* - *Measuring the Amount of Hematoma for Traumatic Brain Injury Patients*
- 21) S.M. Reza Soroushmehr*, Brahmajee Nallamothu, Kevin R. Ward, Kayvan Najarian - *Stenosis Detection through Analysis of Angiogram Videos*
- 22) Negar Farzaneh*, S.M. Reza Soroushmehr, Hirenkumar Patel, Samuel Habbo-Gavin, David Paul Fessell, Kevin R. Ward, Kayvan Najarian - *Outcome Prediction for Abdominal Injured Patients through Image Processing and Machine Learning Techniques*

* - **Presenters**