

Modeling the Opioid Epidemic: Insights and Potential Solutions from Computational Science Workshop

University Club, Ballroom A
123 University Place
Pittsburgh, PA 15260

Monday, October 2, 2017		
7:30 am-8:00 am	Registration and Continental Breakfast	Ballroom A First Floor
8:00 am-8:15 am	Welcome and Opening Remarks	Donald S. Burke University of Pittsburgh
8:15 am-9:00 am	Plenary Speaker <i>The Opioid Epidemic: A View from NIDA</i>	Carlos Blanco National Institute on Drug Abuse
9:00 am-10:30 am	<p>WORKSHOP SESSION 1 Representing the Opioid Epidemic: BIOLOGICAL SCALE</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Tim Lezon, University of Pittsburgh <p>Speakers:</p> <ul style="list-style-type: none"> • Ivet Bahar, University of Pittsburgh <i>Insights Into the Molecular Mechanisms of Dopamine Signaling in Dopamine Neurons and Effect of Drugs of Abuse</i> • Marta Filizola, Icahn School of Medicine at Mount Sinai <i>Towards the Design of Improved Opioid Therapeutics Using Insights from Molecular Dynamics Simulations and Machine Learning Techniques</i> • Shizhong Han, Johns Hopkins Medicine <i>Network-based Approach to the Genetic Study of Alcohol Dependence</i> <p>Discussants:</p> <ul style="list-style-type: none"> • Andreas Pfenning, Carnegie Mellon University • D. Lansing Taylor, University of Pittsburgh • James Faeder, University of Pittsburgh 	
10:30 am-10:45 am	Break	
10:45 am-11:30 am	Plenary Speaker <i>From Models to Action: How Computational Science Can Inform CDC's Opioid Response</i>	Sarah Bacon Centers for Disease Control and Prevention
11:30 am-12:30 pm	Lunch Ballroom A	
12:30 pm-2:00 pm	<p>WORKSHOP SESSION 2 Representing the Opioid Epidemic: HUMAN SCALE</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Mark Roberts, University of Pittsburgh 	

	<p>Speakers:</p> <ul style="list-style-type: none"> • Hawre Jalal, University of Pittsburgh <i>Representing the Opioid Epidemic Dynamics with a Multi-cohort Simulation Model</i> • Carolina Barbosa, RTI International <i>Cost-effectiveness of HCV Treatment and Harm Reduction for People Who Inject Drugs in San Francisco and Rural Kentucky</i> • Xiang-Qun (Sean) Xie, University of Pittsburgh <i>Drug Abuse Chemogenomics Knowledgebase and TargetHunter® GPU-computing Platform for Neurodisorder Opioid Overdose Studies</i> <p>Discussants:</p> <ul style="list-style-type: none"> • Antoine Douaihy, University of Pittsburgh • Adam Gordon, University of Utah • Jane Liebschutz, University of Pittsburgh Medical Center
2:00 pm-2:15 pm	Break
2:15 pm-4:15 pm	<p>WORKSHOP SESSION 3 Representing the Opioid Epidemic: POPULATION SCALE</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Jeanine Buchanich, University of Pittsburgh <p>Speakers:</p> <ul style="list-style-type: none"> • Donald Burke, University of Pittsburgh <i>Forecasting and Deflecting the Opioid Overdose Epidemic Curve</i> • Margaret Brandeau, Stanford University <i>Modeling Opioid Prescribing Practices in the US: Health Benefits and Harms</i> • Titus Schleyer, Regenstrief Institute <i>Combating the Opioid Epidemic with Big Data Analytics and Live, Nationwide Dashboard</i> • Georgiy Bobashev, RTI International <i>A Path Towards a Comprehensive Model of Opioid Use</i> <p>Discussants:</p> <ul style="list-style-type: none"> • Jonathan Caulkins, Carnegie Mellon University • Julie Donohue, University of Pittsburgh • Christina Mair, University of Pittsburgh
4:15 pm-5:00 pm	Wrap-Up and Next Steps