



Computational Medicine

Wyndham Pittsburgh University Center
100 Lytton Avenue
Pittsburgh, PA 15213

AGENDA

All presentations will take place in the Schenley Ballroom

8:00 a.m. **Registration and Continental Breakfast**

9:00 a.m. **Welcome and Opening Remarks**

Tim Lezon, Director, Biomedical Modeling Core, Clinical and Translational Science Institute
Assistant Professor, Computational and Systems Biology
University of Pittsburgh, School of Medicine

Adrian Lee, Director, Institute for Precision Medicine
Professor, Pharmacology and Chemical Biology
University of Pittsburgh, School of Medicine

9:15 a.m. **Presentation**

QSP modeling as a driver of decision making in pharmaceutical industry

Spyros Stamatelos, Group Leader, Digital Data Sciences
Sanofi US

9:45 a.m. **Presentation**

Chromatin-informed inference of transcriptional programs in gynecologic and basal breast cancers

Hatice Osmanbeyoglu, Assistant Professor, Biomedical Informatics
University of Pittsburgh, School of Medicine

10:15 a.m. **Presentation**

Multi-scale Machine Learning Models for Precision Medicine

Takis Benos, Professor, Computational and Systems Biology
Vice Chair for Faculty Affairs
University of Pittsburgh, School of Medicine

10:45 a.m. **Coffee Break**

11:00 a.m. **Presentation**

Clinical decision support for Acute Kidney Injury

John Kellum, Professor, Critical Care Medicine
Vice Chair for Research
University of Pittsburgh, School of Medicine

11:30 a.m. **Contributed Talk**

11:45 a.m. **Presentation**

Computational methods for discovering novel small molecule therapeutics from microbial communities

Hosein Mohimani, Assistant Professor, Computational Biology
Carnegie Mellon University, School of Computer Science

12:15 p.m. **Lunch and Poster Session**

1:45 p.m. **Presentation**

Bayesian integrative approaches to enable precision medicine

Veera Baladandayuthapani, Professor, Biostatistics
University of Michigan, School of Public Health

2:15 p.m. **Contributed Talk**

2:30 p.m. **Presentation**

Investing in Computation for the Future of Health Care

Keith Callenberg, Director, Machine Learning
Rob Hartman, Director, Translational Science
UPMC Enterprises

3:00 p.m. **Coffee Break**

3:15 p.m. **Presentation**

Steering Biological Adaptation and Evolution Strategically: Computational Game Theory and Opponent Exploitation for Treatment Planning, Drug Design, and Synthetic Biology

Tuomas Sandholm, Angel Jordan Professor of Computer Science
Co-Director, CMU AI
Carnegie Mellon University, School of Computer Science

3:45 p.m. **Contributed Talk**

4:00 p.m. **Presentation**

Mathematical modeling of neuromodulator dynamics for precision medicine

Janet Best, Professor, Mathematics
Co-Director, Mathematical Biosciences Institute
The Ohio State University, College of Arts and Sciences

4:30 p.m. **Final Remarks**

4:45 p.m. **Networking Reception**