



AAPS FORUM TO CONNECT PREDICTIVE MODELERS

MAY 6–7, 2019 • HYATT REGENCY BOSTON HARBOR, BOSTON, MA

Monday, May 6, 2019

7:30 am – 9:30 am	AAPS Registration
7:30 am – 8:30 am	Continental Breakfast
8:30 am – 8:45 am	Introductory Remarks from Forum Chairs Stacey Tannenbaum, Ph.D., FISO, Astellas Pharma Matthew Riggs, Ph.D., Metrum Research Group
8:45 am – 10:00 am	Opening Remarks, Keynote Introductions Keynote: Predictive Modeling – An Essential Tool for Convergence Science Grace C.Y. Peng, Ph.D., National Institute of Biomedical Imaging & Bioengineering Keynote: New Era of Modeling and Simulation: Regulatory Perspective Yaning Wang, Ph.D., U.S. Food and Drug Administration
10:00 am – 10:30 am	Icebreaker and Coffee Break
10:30 am – 12:00 pm	A Day in the Life of a Predictive Modeler, Part 1 Moderator: Immanuel Freedman, Ph.D., Freedman Patent Process Modeling Matt Metzger, Ph.D., Merck & Co. Quantitative Systems Pharmacology Matthew Riggs, Ph.D., Metrum Research Group Biopharmaceutics and Bioequivalence Fang Wu, Ph.D., U.S. Food and Drug Administration
12:00 pm – 1:30 pm	Lunch Break
1:30 pm – 3:00 pm	A Day in the Life of a Predictive Modeler, Part 2 Moderator: Immanuel Freedman, Ph.D., Freedman Patent

Bioinformatics

Weida Tong, U.S. Food and Drug Administration

Pharmacometrics

Stacey Tannenbaum, Ph.D., FISoP, Astellas Pharma

QSAR

Shraddha Thakkar, Ph.D., U.S. Food and Drug Administration

3:00 pm – 5:00 pm

Breakout Session: Compare and Contrast Modeling Disciplines

5:00 pm – 5:15 pm

Recap of Day One

Stacey Tannenbaum, Ph.D., FISoP, Astellas Pharma

Matthew Riggs, Ph.D., Metrum Research Group

5:15 pm – 5:45 pm

FDA Panel Discussion

Shraddha Thakkar, Weida Tong, Fang Wu, Yaning Wang

5:45 pm – 6:45 pm

Networking Reception

Tuesday, May 7, 2019

7:30 am – 9:30 am

AAPS Registration

7:30 am – 8:30 am

Continental Breakfast

8:30 am – 8:45 am

Introductory Remarks

Stacey Tannenbaum, Ph.D., FISoP, Astellas Pharma

Matthew Riggs, Ph.D., Metrum Research Group

8:45 am – 9:15 am

Breakout Session: Identification of Biggest Challenges in Predictive Modeling

Moderator: Marc Horner, Ph.D., ANSYS Inc.

9:15 am – 10:30 am

Viewing the Horizon: Methodologies for the Next Steps, Part 1

Moderator: Stacey Tannenbaum, Ph.D., FISoP, Astellas Pharma

Combining Mechanistic Modeling with Machine Learning to Predict Cardiotoxicity and Streamline Drug Development

Eric Sobie, Ph.D., Icahn School of Medicine at Mount Sinai

Chaos Synchronization: Identifying and Predicting Noisy Complex Systems

Immanuel Freedman, Ph.D., Freedman Patent

10:30 am – 10:45 am

Coffee Break

10:45 am – 12:30 pm	<p>Breakout Session: Solutions for Biggest Challenges in Predictive Modeling Moderator: Marc Horner, Ph.D., ANSYS Inc.</p>
12:30 pm – 1:30 pm	Lunch Break
1:30 pm – 3:15 pm	<p>Viewing the Horizon: Methodologies for the Next Steps, Part 2 Moderator: Matthew Riggs, Ph.D., Metrum Research Group</p> <p>Boolean Networks: Linking Qualitative and Quantitative Systems Pharmacology Donald Mager, Ph.D., FAAPS, SUNY Buffalo</p> <p>We've Got More Than One Model: Evaluating, comparing, and extending Bayesian predictions Andrew Gelman, Columbia University</p> <p>Spatio-Temporal Modeling: Multi-Scale Systems Approach to Predicting Antibiotic Distribution in Granulomas Joseph Cicchese, University of Michigan</p>
3:15 pm – 3:30 pm	Coffee break
3:30 pm – 3:50 pm	<p>How Good is my Model? A Hitchhikers Guide to Credibility Marc Horner, Ph.D., ANSYS Inc.</p>
3:50 pm – 4:25 pm	<p>Group Discussion: Predictive Modeling Best Practices and Take-Home Messages Moderators: Predictive Modeling Forum Committee</p>
4:25 pm – 4:30 pm	<p>Next steps and Workshop Deliverables Stacey Tannenbaum, Ph.D., FISoP, Astellas Pharma Matthew Riggs, Ph.D., Metrum Research Group</p>