



Conference Day One: Wednesday, February 27th, 2019

08.00 Coffee & Registration

09.00 Chair's Opening Remarks

Kim Branson, Head of ECDi & Artificial Intelligence, Genentech

Applied AI in Drug Discovery: A Look at the Leading Case Studies; Where AI Has Had a Transformative Impact to Date?

09.10 AI & Precision Medicine: Furthering Scientific Understanding of Complex Disease

Tom Chittenden, VP Statistical Sciences, Founding Director, Advanced Artificial Intelligence Research Laboratory, WuXi NextCODE

09.40 Integrating Machine Learning into the Drug Discovery Workflow

Pat Walters, Computation & Informatics Group, Relay Therapeutics

10.10 Harnessing the Power of AI to Improve Translation: From Biology to Discovery & Discovery to Drug Product Development

Brandon Allgood, CTO, Numerate

10.40 Speed Networking

11.00 Morning Refreshments

Clarity in Place of Complexity: How to Best Structure Datasets to Optimize the Insights That Will Be Garnered from AI & Machine Learning Technologies

11.30 Starting from Scratch: Data Driven AI in Target Discovery

Leonardo Rodrigues, Senior Director of AI & Machine Learning, Berg Health

12.00 Insights from Machine Learning in Support of Reverse Translation

Sandor Szalma, Global Head of Computational Biology, Takeda

12.30 Boosting Machine Learning with Knowledge Graphs & Node Embeddings

David Wild, Founder & President, Data2Discovery; Associate Professor, Indiana University

12.50 Networking Lunch

14.00 Implementation of Deep Learning Based ADME Predication in Small Molecule Drug Discovery Pipeline

Lei Jia, Senior Scientist, Amgen



14.30 AI Empowered Drug Discovery

Jie Fan, CEO, Accutar Biotech

14.45 The Practical Impact of AI in Drug Discovery So Far

Friedrich Rippmann, Director, Computational Chemistry & Biology, Merck KGaA, Darmstadt, Germany

15.15 Afternoon Refreshments

16.00 Breakout Roundtables:

1. Roundtable 1 - How to redefine and set up drug discovery infrastructure to optimize the integration and output of AI and machine learning technologies?

Moderated by: Kim Branson, Head of ECDi & Artificial Intelligence, Genentech

2. Roundtable 2 - What are the most effective ways pharmaceutical companies, AI and technology companies, and consortia can work together for mutual success?

Moderated by: David Wild, Founder & President, Data2Discovery; Associate Professor, Indiana University

17.00 Chair's Closing Remarks

Kim Branson, Head of ECDi & Artificial Intelligence, Genentech

17.10 Close of Day 1



Conference Day Two: Thursday February 28th, 2019

08.30 Breakfast & Networking

09.10 Chair's Opening Remarks

Ari Allyn-Feuer, Principal Data Scientist, GlaxoSmithKline

Embracing the Culture of AI: Why Collaboration is Key for Biology & AI to Prosper

09.20 Lessons Learned from Small Molecule Drug Discovery Context – Faster and Better Decisions by Virtual ADME Tools

Ji Ma, Principal Scientist, Amgen

09.50 AI in Drug Discovery Beyond Conventional Data Sciences

Kevin Hua, Senior Manager, AI & Machine Learning Development, Bayer

10.20 Building Automated Workflows for Drug Discovery Applications

Gabriel Musso, CSO, BioSymetrics

10.30 Collision of Science & AI: How Traditional Drug Developers Need to Work Together Effectively with AI Pioneers

Guido Lanza, President & CEO, Numerate

11.00 Morning Refreshments

Harnessing Virtual Knowledge to Improve the Predictability of Drug Discovery Decisions

11.40 Computational Drug Design Engine by A2A Pharmaceuticals

Edward Painter, Founder & CEO, A2A Pharmaceuticals

12.10 The Role of AI and Machine Learning in Drug Discovery

Pankaj Agarwal, Senior Fellow, Computational Biology, GSK

12.40 Extending Machine Learning Tools to Increase Drug Discovery Pipeline Robustness and Improve the Chances of Translational Success

Lina Nilsson, Senior Director of Data Science Product, Recursion Pharmaceuticals

13.10 Machine Learning Descriptors for Epitope Mapping and Affinity

Rafael Depetris, Principal Scientist, Kadmon Corporation

13.40 Networking Lunch

14.40 Toward a Universal Biomedical Data Translator: from Vision to the Working Prototype

Marcin von Grotthuss, Senior Computational Scientist, The Broad Institute

15.10 AI is Just a Tool - But will it Fundamentally Change the Way We Do Drug Discovery?

Ed Addison, Chairman & CEO, Cloud Pharmaceuticals, Inc

15.40 Applying Artificial Intelligence to Drug Discovery: A Lesson in Success (and Frustration) For Automating *In Vivo* Assays

Benjamin Adams, Scientist, Eli Lilly

16.10 Chair's Closing Remarks

Ari Allyn-Feuer, Principal Data Scientist, GlaxoSmithKline

16.15 End of Day 2 & Close of 2nd AI Pharma Innovation: Drug Discovery Summit 2019