



**Conference Day One: Wednesday, February 27<sup>th</sup>, 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 28<sup>th</sup>, 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 2<sup>nd</sup> AI Pharma Innovation: Drug Discovery Summit 2019**