

AI IN PHARMA

S U M M I T

5th Annual
Wednesday, October 13th | Virtual, EST Timezone

AI undoubtedly remains one of the most instrumental and cutting-edge technologies in drug R&D's arsenal. However, huge obstacles such as data, organisational buy-in and hype management still need to be overcome to successfully and completely implement AI in Pharma.

The fifth annual AI in Pharma Summit returns to tackle these crucial questions, share lessons learned by industry front runners, and showcase exactly where the proverbial needle is being moved. Through interactive panel discussions and case studies focused on both the highs and the lows, the AI in Pharma Summit will deep-dive into the most urgent functional gaps hindering AI-assisted progress in drug discovery and development and host the conversations to establish future success in the industry.

Wednesday, October 13th, 2021

8:45am ET **Chair's Opening Remarks & Setting the Scene**

8:55am ET Keynote Presentation - **Intelligent Systems for Discovery, Translation and Implementation**

Calum Macrae, Vice Chair for Scientific Innovation, **Brigham and Women's Hospital & Harvard Medical School**

9:25am ET Wellness Break

9:30am ET Keynote Panel Discussion with Open Q&A - **Will We Always Be Limited by Data?**

Data has been, and continues to be, arguably the biggest challenge facing AI in Pharma. This panel will deep-dive into our main data limitations with leaders from across the field, and tackle the crucial questions that need to be addressed in order to overcome the greatest hurdle in the industry.

- How is AI being held back by data, and what progress have we made over the last 5 years?
- How do the data hurdles differ throughout between discovery and development, and how we can overcome these to improve AI's clinical success?

- Are data sharing and privacy-preserving computing the best solutions to our data problem, and what unique challenges do they bring?
- Are large datasets always the answer, or can we still see success with small datasets?
- How can we tackle the lack of diversity in biomedical data and start to close the data gap?

Lihua Yu, President and Chief Data Science Officer, **H3 Biomedicine Inc.**

Gabriel Eichler, VP & Head of Data, **Data 42 at Novartis**

Reza Olfati-Saber, Global Head of AI and Deep Analytics, **Sanofi**

Raunaq Malhotra, Director of Digital Operations & Innovation, **Merck**

Gayle Wittenberg, Senior Director, Neuroscience Data Science, **The Janssen Pharmaceutical Companies of Johnson & Johnson**

Moderated by: Yugal Sharma, Senior Director, **CAS Custom Services**



10:25am ET Morning Extended Wellness Break

Challenges and Lessons Learned from AI in Drug Discovery

11:00am ET Presentation - **Discovery of Novel Next-Generation Protein-Based Biologics**

Representative from AbSci



11:25am ET Wellness Break

11:30am ET Presentation - **Data: Breaker of Silos - The Value of a Strategy That's End-to-End and Back Again**

Gayle Wittenberg, Senior Director, Neuroscience Data Science, **Janssen**

11:55am ET Wellness Break

12:00pm ET Presentation - **Overcoming the Data Challenges of AI Model Training and Validation**

- A look at how in silico drug discovery relies on biologically relevant, structured & fully annotated high-quality experimental data to train and validate AI models; yet, conventional lab operations are increasingly insufficient to deal with the data requirements of AI-/ ML-driven drug discovery
- Explore how Ulysses, the fully automated drug discovery platform developed by Arctoris, takes a different approach to generate and capture rich, reliable, and robust data with peerless efficiency, reproducibility, and quality
- Learn about how other industry leaders partner with Arctoris to accelerate their AI-driven drug discovery work, and take home actionable insights on the technological approach and expertise necessary to power your programs with the right data at the right time

Martin-Immanuel Bittner, CEO, **Arctoris**



Lunch

1:30pm ET **Tour of Expo**

2:00pm ET Presentation - **Presentation by Nanome**



AI in Clinical Development

2:00pm ET Presentation - **Designing Clinical Trials and Evaluating Eligibility Criteria using AI**

Shemra Rizzo, Senior Data Scientist, **Genentech**

2:25pm ET Wellness Break

2:30pm ET Presentation - **Using Machine Learning to Drive Biological Discovery and Clinical Impact**

Puneet Batra, Director, Machine Learning | Machine Learning for Health Co-Lead, **Broad Institute of MIT and Harvard**

2:55pm ET Wellness Break

3:00pm ET Presentation - **Bridging the Gap Between Drug Development, Clinical Trials and the Clinic**

Lina Williamson, Co-Founder, President & Head of Innovation, **TMA Precision Health**

3:25pm ET Extended Wellness Break

3:55pm ET Panel Discussion with Open Q&A - **How Do We Make Pharma a Data-Driven Organisation?**

AI technologies are now fully established in drug R&D, yet structural challenges such as organisational buy-in and cultural awareness still limit the success of the industry. Deep-dive into the crucial organizational questions that need answers for pharma to truly become a data-driven organization.

- What are the biggest organizational challenges we've faced to date, and what have we learned from these?
- What is the most effective strategy for acquiring or collaborating with AI start-ups?
- How do we find the right balance between developing internal capabilities and collaborating with third parties?
- What are the benefits and risks of making pharma a more data-driven organisation?
- How do we encourage a shift in cultural awareness to increase AI support and adoption by traditional roles in pharma, and how do you get scientists and data scientists to work together?

Ryan Copping, Global Head of Data Science Acceleration, Product Development Data Science, **Genentech**

Deepak Kumar Rajpal, Head, Translational Sciences US, **Sanofi**

Moderated by: J Christian Baber, Head of Scientific & Pharmaceutical Data, Informatics & Systems, **The Janssen Pharmaceutical Companies of Johnson & Johnson**

End of AI in Pharma Summit 2021