# MEDICINAL CHEMISTRY STRATEGY MEETING SAN DIEGO 2021

🛗 May, 25th Tuesday, 2021 👂 Hard Rock Hotel San Diego



# MEDICINAL CHEMISTRY

**SPONSORS** 

**AGENDA** 

Learning

#### **KEYNOTE PRESENTATION**

TRACK 1: **Artificial Intelligence / Machine** 

TRACK 2: **Chemical Biology & Cheminformatics** 

TRACK 3: **Design & Custom Synthesis** 

TRACK 4: Hit to Lead Identification

TRACK 5: **Integrated Drug Discovery** 



### **OUR VISION**

To be a platform for creating life-saving therapies and to facilitate the creation of a completely patient centric pharmaceutical industry.

#### **OUR MISSION**

By encouraging key leaders and their companies to put the patient at the very heart beat of every innovation. Sharing valuable insights and strategies to assist in the discovery, development and commercialisation of life saving therapies.

### **OUR UNIQUE MEETING FORMAT**

# 22

#### **Roundtable Discussions**

These interactive and informal discussion groups are the hallmark of the meeting. The brightest minds in the industry are brought together in 60-minute sessions that enable participants from all over the world to share ideas, challenges and lessons learned.



#### Personalised Agenda

Each delegate receives a personalised agenda with the roundtable discussions that you choose. You only attend sessions and meetings that fit your challenges and interests, ensuring your time spent on the online platform is focused and well-utilised.



#### **One-to-one Meetings**

The most effective and time efficient way to assess potential partners at a strategic level. Identify key solution providers that can take your business to the next level and we will help arrange private meetings so you can connect.



#### **Strategic Networking**

Strategic networking opportunities form a key benefit of the meeting. Our new online format for building and strengthening alliances to make lasting connections that benefit you.

### **CONTRIBUTORS TO THE AGENDA**

**Paul Galatsis** 

VP, Chemistry

**Therapeutics** 

**Vibliome** 

#### **Uli Schmitz** Executive Director, Structural Chemistry **Gilead Sciences**

















Syed Askari CEO and Founder Maculus **Therapeutics** 

**Prasun Mishra** 

Agility **Pharmaceuticals** 





**Robert Hilgraf** Senior Director, Medicinal Chemistry **REVOLUTION** Medicines









**Bill Shirley** 

Structural Chemistry

**Gilead Sciences** 

Senior Director.









Mexico

### MEDICINAL CHEMISTRY **STRATEGY MEETING SAN DIEGO 2021**



### **ASSOCIATE SPONSOR**



**CD** Visit Website

WuXi AppTec provides a broad portfolio of R&D and manufacturing services that enable companies in the pharmaceutical, biotech and medical device industries worldwide to advance discoveries and deliver groundbreaking treatments to patients. As an innovation-driven and customer-focused company, WuXi AppTec helps our partners improve the productivity of advancing healthcare products through cost-effective and efficient solutions. With industry-leading capabilities such as R&D and manufacturing for small molecule drugs, cell and gene therapies, and testing for medical devices, WuXi AppTec's open-access platform is enabling more than 3,700 collaborators from over 30 countries to improve the health of those in need - and to realize our vision that "every drug can be made and every disease can be treated.

#### **CO-HOST SPONSORS**







CO Visit Website

Collaborative Drug Discovery (CDD) provides an intuitive software suite extensively used by creative biologists and chemists working in academic, biotechnology and pharmaceutical settings. Their flagship product, CDD Vault, enables researchers to intuitively organize and analyze both biological study data and chemical structures, and to collaborate with partners through a straightforward web interface.

Nanome, the first virtual reality (VR) software company to launch an immersive real-time collaboration platform for scientific discovery, is changing the way we understand and interact with science at the molecular level. The software environment allows users to visualize, modify, and simulate proteins, chemical compounds, and nucleic acids to accelerate scientific decision making. The platform facilitates effective communication of data and integrates with existing computational chemistry workflows—features that have led to the adoption of the San Diego-based company's enterprise solution by several pharmaceutical and biotech companies worldwide. For more information, visit nanome.ai

### **KEY OPINION LEADER**



















# AGENDA

### MEDICINAL CHEMISTRY STRATEGY MEETING SAN DIEGO 2021



TRACK & ROOM (TIME)	01 - ARTIFICIAL INTELLIGENCE / MACHINE LEARNING	02 - CHEMICAL BIOLOGY CHEMINFORMATICS	& 03 - DESIGN &	CUSTOM SYNTHESIS	04 - HIT TO	LEAD IDENTIFICATION	05 - INTEGRATED DRUG DISCOVERY
08:00 - 08:30	REGISTRATION AND WELCOME						
08:30 - 09:00	OPENING KEYNOTE PANEL SESSION  Assessing the COVID-19 Impact on Drug Discovery in Medicinal Chemistry: The Industry Priorities for 2021?  • Weighing the pros and cons of rapid global therapy development to strategize for lost time and improve efficiency in 2021 and beyond  • How we utilize data integration from multiple sources to accelerate progress • Evaluating the costs & benefits of emerging technologies • Explore new opportunities for research and funding in 2021						
09:00 - 10:00	Evaluating the impact of AI generative methods and ML models in drug discovery  Uli Schmitz —  Executive Director, Structural Chemistry,  Gilead Sciences	Shifting away from the single-target paradlinking pharmacological data with biological via high-throughput computational method Mike Petrassi — VP, Medicinal Chemistry, Calibr/Scripps Research	current state and outloods  Syed Askari —  President & CEO, Macu	in synthesis: discussing the ook towards better efficiency lus Therapeutix	Novel strategies to capabilities with mu	balancing high-throughput ulti-parametric studies	Partnering and Licensing with an Academic Medical Center Peter Kotsonis & Ellen Kats, Ph.D (Co-host) — Executive Director, Office of Strategic Alliances, UCSF & Assistant Director, Business Development & Licensing, UCSF
10:00 - 11:00	10:00 - 10:20: NETWORKING	G / 1-1 MEETINGS	10:20 - 10:40: NET	WORKING / 1-1 MEETINGS		10:40 - 11:00:	NETWORKING / 1-1 MEETINGS
11:00 - 12:00	多明康德 WuXi AppTec	CDD, VAUL  COLLABORATIVE DRUG DISCO	robotics and advanced Topic TBC for Sponsor	radigm: the marriage of I analytics in drug design		Vanome	Advancing cycle time, analysis and purification efficiency through novel technologies and innovative approaches  Topic TBC for Sponsor
12:00 - 13:00	NETWORKING LUNCH						
13:00 - 13:30	KEYNOTE PRESENTATION						
13:30 - 14:30	Beyond the AI hype: What has worked, and what will be improved in the future?  Bill Shirley — Senior Director, Structural Chemistry, Gilead Sciences  Leveraging DNA-encoded libraries and cheminformatics to discover novel reactions and chemistries		ons and side? What can we do clinic? Paul Galatsis —			chods for Hit to Lead do we prioritize good from	Effective Integration of Multidisciplinary Teams to Ensure Seamless Drug Discovery Processes  Yuhua Ji —  Head of Medicinal Chemistry, Zai Lab US
14:30 - 15:30	14:30 - 14:50: NETWORKING	G / 1-1 MEETINGS	14:50 - 15:10: NET	WORKING / 1-1 MEETINGS		15:10 - 15:30:	NETWORKING / 1-1 MEETINGS
15:30 - 16:30	Leveraging AI and ML to extract value from large, disparate, internal/external data sets to aid drug discovery Topic TBC for Sponsor	Improving CADD capacities: moving past AI and ML towards the quantum age Topic TBC for Sponsor	outsourcing speed, rel			os and cons of molecular ons in fragment-based drug	Optimising early drug discovery through harmonised DDI testing, genetic heterogeneity and PK data analysis  Topic TBC for Sponsor
16:30 - 17:00	16:30 - 1		16:50 - 17:00: BREAK				
17:00 - 18:00	Beyond the Hype of New Machine Learning Technology and Onto Delivery Tudor Oprea — Professor of Medicine and Chief, Translational Informatics Division, Department of Internal Medicine, University of New Mexico	and structuring the right data sets  Katherine Matsumoto —  Director, Product Management,  Recursion Pharmaceuticals		Novel computational approaches to design next gen drugs keeping optimized scale up and yield in mind		Protein Interactions (PPIs) – chnologies dicinal Chemistry, cines	Reinstating phenotypic screening in your drug discovery workflow: discover novel phenotypes brought by innovative screening tools  Prasun Mishra —  CEO, Agility Pharmaceuticals
18:00 - 19:00	DRINKS & CANAPES RECEPTION						

















# KEYNOTE PRESENTATION

### MEDICINAL CHEMISTRY **STRATEGY MEETING SAN DIEGO 2021**





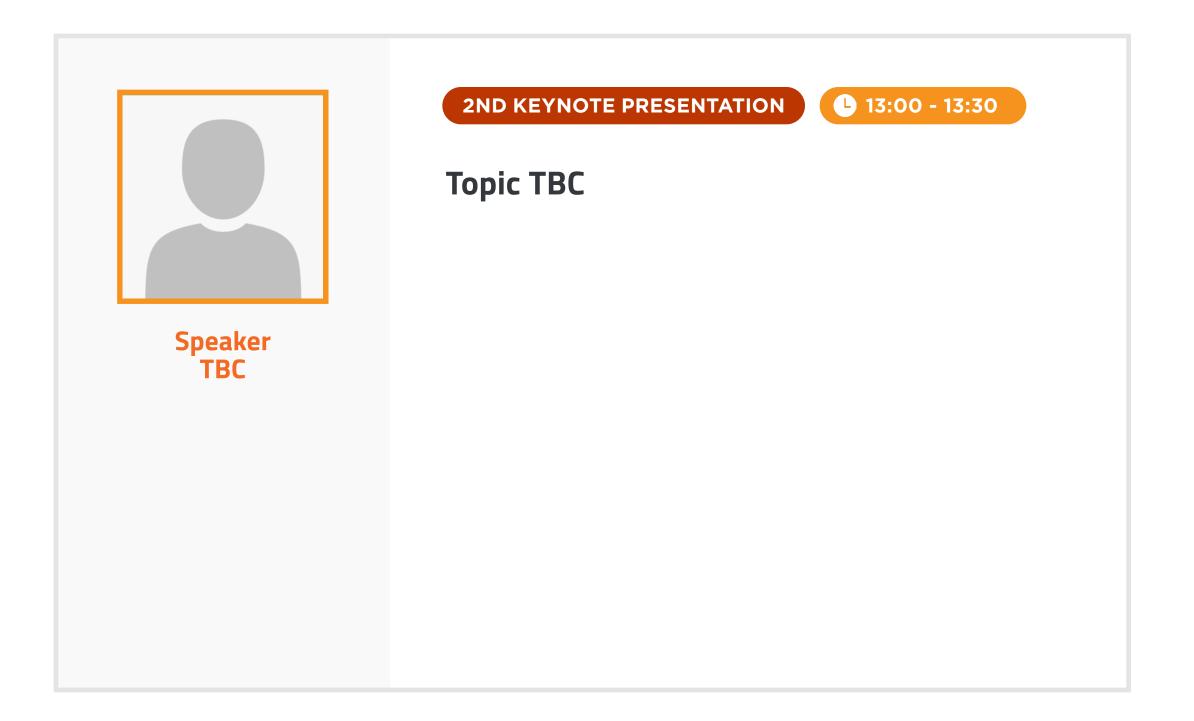
**TBC** 

OPENING KEYNOTE PANEL SESSION

**L** 08:30 - 09:00

### Assessing the COVID-19 Impact on **Drug Discovery in Medicinal Chemistry: The Industry Priorities for 2021?**

- Weighing the pros and cons of rapid global therapy development to strategize for lost time and improve efficiency in 2021 and beyond
- How we utilize data integration from multiple sources to accelerate progress
- Evaluating the costs & benefits of emerging technologies
- Explore new opportunities for research and funding in 2021





















## TRACK 1 Artificial Intelligence / Machine Learning

### MEDICINAL CHEMISTRY **STRATEGY MEETING SAN DIEGO 2021**





**Uli Schmitz** Executive Director, Structural Chemistry **Gilead Sciences** 

#### **9:00 - 10:00**

**Evaluating the impact of AI generative** methods and ML models in drug discovery



#### **L** 11:00 - 12:00

SPONSOR

Harnessing the technology of noisy intermediate-scale quantum (NISQ) in drug discovery - Title TBC





**Bill Shirley** Senior Director, Structural Chemistry **Gilead Sciences** 

#### **L** 13:30 - 14:30

Beyond the AI hype: What has worked, and what will be improved in the future?



#### **L** 15:30 - 16:30

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Leveraging AI and ML to extract value from large, disparate, internal/ external data sets to aid drug discovery



#### **Tudor Oprea Professor of Medicine** and Chief, Translational Informatics Division, Department of Internal Medicine

University of **New Mexico** 

#### **17:00 - 18:00**

**Beyond the Hype of New Machine Learning Technology and Onto Delivery** 

















### TRACK 2 Chemical Biology & Cheminformatics

### MEDICINAL CHEMISTRY **STRATEGY MEETING SAN DIEGO 2021**





Mike Petrassi VP. Medicinal Chemistry Calibr/Scripps Research

#### **(** 09:00 - 10:00

Shifting away from the single-target paradigm: linking pharmacological data with biological pathways via high-throughput computational methods





**SPONSOR** 

Discussing strategies in modeling of chemical reactions at larger scales -**Title TBC** 

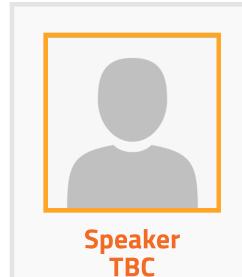




**Speaker TBC** 

**L** 13:30 - 14:30

Leveraging DNA-encoded libraries and cheminformatics to discover novel reactions and chemistries



**L** 15:30 - 16:30

SPONSOR

Improving CADD capacities: moving past classical AI and ML towards the quantum age

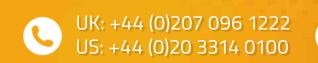


**Katherine Matsumoto** Director, Product Management Recursion **Pharmaceuticals** 

**17:00 - 18:00** 

**Evaluating the challenges surrounding** obtaining and structuring the right data sets

















## TRACK 3 Design & Custom Synthesis

### MEDICINAL CHEMISTRY **STRATEGY MEETING SAN DIEGO 2021**

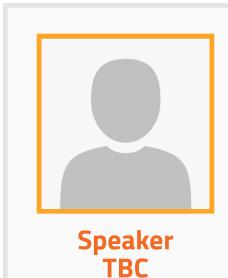




**Syed Askari** President & CEO Maculus **Therapeutix** 

#### **6** 09:00 - 10:00

Optimizing autonomy in synthesis: discussing the current state and outlook towards better efficiency



#### **L** 11:00 - 12:00

SPONSOR

Furthering the new paradigm: the marriage of robotics and advanced analytics in drug design



**Paul Galatsis** VP, Chemistry **Vibliome Therapeutics** 

#### **13:30 - 14:30**

How does the target integrate with the clinical side? What can we do to ensure success in the clinic?



#### **L** 15:30 - 16:30

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Innovative design & development steps to optimise outsourcing speed, reliability and cost



#### **Speaker** TBC

#### **17:00 - 18:00**

Novel computational approaches to design next gen drugs keeping optimized scale up and yield in mind

















### TRACK 4 Hit to Lead Identification

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#### **L** 09:00 - 10:00

Novel strategies to balancing highthroughput capabilities with multiparametric studies



#### **L** 11:00 - 12:00

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Innovative approaches to early drug discovery through novel chemical modalities

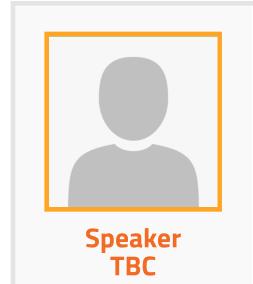




Discovery **RAPT Therapeutics** 

#### **L** 13:30 - 14:30

**Computational Methods for Hit** to Lead Optimization - how do we prioritize good from bad?



#### **L** 15:30 - 16:30

SPONSOR

Delineating the pros and cons of molecular dynamics simulations in fragment-based drug design



**Robert Hilgraf** Senior Director, **Medicinal Chemistry REVOLUTION** Medicines

#### **17:00 - 18:00**

**Targeting Protein-Protein Interactions** (PPIs) - Challenges and Technologies



















### TRACK 5 Integrated Drug Discovery

### MEDICINAL CHEMISTRY STRATEGY MEETING SAN DIEGO 2021





Executive Director, Office of Strategic Alliances

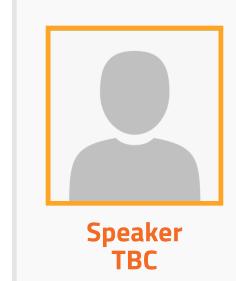


**Development & Licensing** 

(CO-HOST)

**L** 13:30 - 14:30

Partnering and Licensing with an **Academic Medical Center** 



**L** 11:00 - 12:00

SPONSOR

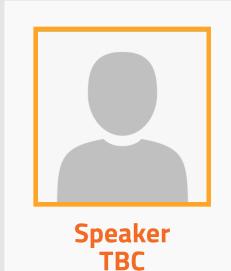
Advancing cycle time, analysis and purification efficiency through novel technologies and innovative approaches



Yuhua Ji Head of Medicinal Chemistry Zai Lab US

**L** 13:30 - 14:30

**Effective Integration of** Multidisciplinary Teams to Ensure **Seamless Drug Discovery Processes** 



**L** 15:30 - 16:30

SPONSOR

Optimising early drug discovery through harmonised DDI testing, genetic heterogeneity and PK data analysis



**Prasun Mishra Agility Pharmaceuticals** 

**17:00 - 18:00** 

Reinstating phenotypic screening in your drug discovery workflow: discover novel phenotypes brought by innovative screening tools











