



# Next-Generation Undruggable

Boston, MA, Tuesday, October 11<sup>th</sup> 2022

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## 9:00AM Chair's Opening Remarks & Setting the Scene

- A look at what will be covered - what will be the key learning outcomes of the day?

Nicholas Goldner, Co-Founder & CEO, [resistanceBio](#)

## 9:10AM Keynote Presentation: Drugging the Undruggable: Unpacking the Paradox

- Drug discovery evolves in punctuated leaps as new transformative technologies pile onstream with promises of a new dawn
- With a wealth of new tools, from AI to degrader-based modalities, the path from target discovery to drug development can now take a huge number of new routes
- PhoreMost have pioneered PROTEINI®, a discovery tool to capitalise on the new biology revolution, and we're applying it using our SITESEEKER® platform to unpick new drug discovery in oncology and targeted protein degradation

Benedict Cross, Chief Technology Officer, [Phoremost](#)

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## 9:35AM Case Study: Leveraging Fragment Based Drug Discovery for Undruggable Targets

- Fragment to clinic case study.
- New technologies in FBDD, including cryoEM.
- Future FBDD challenges.

**Nicola Wilsher**, Vice President of DMPK and Preclinical Development, [Astex Pharmaceuticals](#)

### 9:55AM Keynote Panel Discussion with Open Q&A: Lessons Learned from the First Wave of Drugging the Undruggable

With the extensive history and previous difficulties in the field of “undruggable diseases” we have gained a wealth of experience from the mistakes and challenges of the past. This panel aims to highlight the obstacles of previous research in order to have a greater rate of success in the future.

- What were the key lessons learned from previous ventures into drugging the undruggable?
- What makes this field of research so difficult?
- How can we overcome the challenges and difficulties of the past?
- How can we increase efficiency in the discovery of new drugs?
- What are the most promising new approaches in undruggable research?

**Greg Verdine**, Founder, President and CEO, [FogPharma/ LifeMine Therapeutics](#)

**Pascal Fortin**, Chief Scientific Officer, [Relay Therapeutics](#)

**Emiliano Clo**, Scientific Advisor, [Novo Nordisk Bio Innovation Hub](#)

**Maria Van Dongen**, Head of External Innovation, Therapeutics Discovery, [The Janssen Pharmaceutical Companies of Johnson & Johnson](#)

**Stephen Fawell**, VP Head Oncology Discovery, [AstraZeneca](#)

Moderated by: **Christian Dillon**, Chief Scientific Officer, [Phoremost](#)

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### 10:40AM Morning Refreshments & Speed Networking

### 11:20AM Case Study: Unlocking Oncogenes with Covalent Approaches

- History of the relationship between oncology and covalent molecules
- The first highly specific covalent molecule against the most mutated oncogene in cancer (PI3K-alpha)
- Tools involved in finding new covalent drugs

**Neil Dhawan**, Chief Executive Officer, [Totus Medicines](#)

### 11:40AM Case Study: Drugging the Next Wave of Oncology Targets: Precision Oncology 2.0

- Integrating and optimizing discovery technologies to drug next generation targets in oncology
- Defining the path to discovery for challenging targets

- Leveraging chemical proteomics to target transcription factors

**Darrin Stuart**, Chief Scientific Officer, [Scorpion Therapeutics](#)

#### **12:00PM Presentation: Hit Generation Sciences, the Novartis Approach to Tackle the Undruggable**

- HGS combines cutting edge technology platforms with Medicinal Chemistry
- Extensive sampling of chemical space through DNA encoded small molecules and in vitro-translated peptides
- Integration of AI/ML to explore virtual chemical space
- A broad host of modalities allow target and disease tailored hit generation strategies are required

**Horst Hemmerle**, Executive Director Global Discovery Chemistry, [Novartis](#)

#### **12:20PM Panel Discussion with Open Q&A - Why are Partnerships so Crucial in Undruggable?**

- How does your organization approach partnerships in this space?
- Why are partnerships and investments so important to drive drug discovery and development in 'undruggable'?
- What unique risks associated with forming partnerships in this field, and how can we mitigate these?
- When is the best time to enter a partnership and what examples of success can we learn from?
- How have partnerships historically shaped the undruggable landscape, and how can we expect this to develop over the next 5 years?

**Natalia Ulyanova**, Business Development Director, Oncology, [Astellas Pharma](#)

**Niels Emmerich**, Vice President, Global Head Search & Evaluation, [AbbVie](#)

**Jim MacKrell**, Associate Vice President & Head of Boston/US East Coast Venture Science - Business Development, [Eli Lilly and Company](#)

Moderated by: **Mike Crackower**, Chief Scientific Officer, [Ventus Therapeutics](#)

#### **1:00PM Lunch & Networking**

#### **2:00PM Roundtables**

During these intimate breakout sessions, attendees will discuss the key questions involved in drugging the "undruggable". Through deep-dive discussions, examples and peer-to-peer learning, these interactive roundtable sessions will allow attendees to uncover answers to questions that are not possible through presentations and panels. Each session will be repeated, meaning you don't have to miss out!

**Roundtable - How to Bring Industry Value and Interest to a Next Generation Startup: Science to Scale Up**

- Have your questions answered on how to grow a small biotech
- How do you gain interest from investors?
- What is the process of scaling up a biotech?

**Nicholas Goldner**, CEO & Co-Founder, [resistanceBio](#)

**Eric Lindquist**, CBO, [resistanceBio](#)

**Jon Hu**, Co-Founder & CEO, [Pepper Bio](#)

**Brian Fiske**, Co-Founder & CSO, [Mythic Therapeutics](#)

**John Haserick**, VP, Platform Development, [Innovac Therapeutics](#)



**Roundtable - What is the Impact of Protein Structures, Physics-Based Modeling, and Machine Learning on Undruggable Research?**

- What are the main reasons why 85% of the human proteome is considered undruggable?
- How does greater access to predicted and experimental structures help move undruggable research forward?
- How can the use of physics-based modeling & ML modeling enable and accelerate drug discovery for challenging targets?
- What does physics-based modeling & ML have in store for the future of drug discovery?

**Sayan Mondal**, Senior Director, [Schrödinger Therapeutics Group](#)

**Duncan Hamish Wright**, Vice President, Translational Science, [Schrödinger Therapeutics Group](#)



**2:40PM Time to Switch!**

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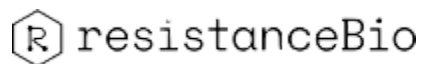


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**3:20PM Afternoon Refreshments & Networking**

**4:00PM Case Study: Case Study by Nanome**

Representative of **Nanome**



**4:25PM Case Study: Utilizing Oligonucleotides to Upregulate Genes**

- Understanding how harnessing regulatory RNA can be used to control gene expression.
- Case example - utilizing oligonucleotides to address haploinsufficient disease
- Determine the future potential of this method.

**Caleb Moore**, SVP, Portfolio Strategy & Business Operations, **CAMP4 Therapeutics**

**4:45PM Case Study: Application of the ReSOLVE platform to identify druggable pockets and conduct virtual screening in the absence of any known chemical matter**

- Learn about novel approaches of advanced protein MD and solvation analysis to rapidly identify novel pockets and pocket conformations
- See/Hear/Review examples of high fidelity virtual screens using ReSOLVE and libraries of billions and potentially trillions of compounds
- Explore a vision for the future to identify pockets and novel chemical matter for difficult-to-drug targets

**Mike Crackower**, Chief Scientific Officer, **Ventus Therapeutics**

**5:05PM Panel Discussion with Open Q&A : First Wave and Next Generation Protein Degradation: How Protein Degradation Evolved?**

We all know of protein degradation but where is it heading in the future? This panel will discuss the more well known methods of protein degradation and lessons learned along the way. We will also discover the up and coming, novel approaches and how these can impact the future of undruggable disease as we know it.

- What are the different methods of protein degradation?
- What challenges remain in the field of protein degradation?
- How does the exploitation of protein degradation help us to treat the once undruggable diseases?
- What are the risks of these methods?
- What future effect do these methods have on how we approach undruggable discovery?

**Randy Teel**, Senior VP, Corporate & Business Development, [Arvinas](#)

**Gwenn Hansen**, Chief Scientific Officer, [Nurix Therapeutics](#)

**Chris De Savi**, Senior Vice President and Head of Drug Discovery, [Kymera Therapeutics](#)

**Jesse J. Chen**, Chief Technology Officer, [Triana Biomedicines](#)

**5:50PM Chair's Closing Remarks**

- Summary of key learnings discussed throughout the day.
- What is the impact on medicine and the future of undruggable research?

**Nicholas Goldner**, Co-Founder & CEO, [resistanceBio](#)

**6:00PM Drinks Reception Hosted by Title Partners, [Phoremost](#)**

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