## **Preliminary Program**

(February 26, 2024)

# Delivery of Nucleic Acid Therapeutics II: Biology, Engineering and Development

April 4 – 8, 2024 Grand Hotel Minareto Siracusa, Sicily, Italy

#### **Conference Chairs:**

Steven F. Dowdy
UCSD School of Medicine
USA

Laura Sepp-Lorenzino Intellia Therapeutics USA Matt Stanton Generation Bio USA





### **Engineering Conferences International**

369 Lexington Avenue, 3rd Floor #389 New York, NY 10017, USA www.engconfintl.org – info@engconfintl.org

#### Thursday, April 4, 2024

15:00 – 16:30	Conference check-in (Hotel Lobby)
16:30 – 16:40	Welcome and General Announcements
16:40 – 17:30	Keynote Talk 1 The Chemistry of Something Mano Manoharan, Alnylam Pharmaceuticals, USA
17:30 – 19:00	Welcome Reception on Titanic Terrace with Ortigia Sea View followed by Local Sicilian Wine Tasting
19:00 – 20:30	Dinner (Neos Restaurant)
20:30 – 21:30	Social Hour

Friday,	April	5, 2024
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07:30 – 09:00	Breakfast Buffet (Neos Restaurant)
09:00 – 09:25	Setting the Delivery Stage Steve Dowdy, UCSD, USA
	Session 1: Clinical Stage Delivery Chair: Virginia Arechavala-Gomeza, Biocruces Bizkaia Health Research University, Spain
09:25 – 09:50	Selective Organ Targeted (SORT) LNPs: focus on lung delivery and PCD program Dan Siegwart, UT Southwestern/ReCode, USA
09:50 – 10:15	TfR Ab conjugated oligos for muscle delivery Art Levin, Avidity Biosciences, USA
10:15 – 10:45	Coffee Break
10:45 – 11:10	TfR-Fab conjugated oligos for muscle delivery Oxana Beskrovnaya, Dyne Therapeutics, USA
11:10 – 11:35	CRISPR LNPs (include particle/cargo analytics) Kristy Wood, Intellia Therapeutics, USA
11:35 – 11:50	TBD Short talk
11:50 – 12:05	TBD Short talk
12:05 – 14:00	Lunch (Nesos Restaurant or Latomie Terrace, depending on weather)
	Session 2: Endosomal Trafficking and Escape Chair: Steve Dowdy, UCSD, USA
14:00 – 14:25	LNP Endosomal Escape Anders Wittrup, Lund University, Sweden
14:25 – 14:50	<b>TBD</b> Marino Zerial, Max Plank Institute, Germany
14:50 – 15:15	ENDOSCAPE: Triterpene glycoside conjugates allow efficiently endosomal escape of diverse targeted payloads (Short Talk) Guy Hermans, Supreme Technologies B.V., the Netherlands
15:15 – 15:40	Nucleic acid immunity: the key to successful nucleic acid therapeutics Gunther Hartmann, University of Bonn Hospital, Germany
15:40 – 16:00	Coffee Break
16:00 – 16:25	Predictive Ex Vivo Models of LNP Behavior Dwight Morrow, Moderna
16:25 – 16:40	TBD Short talk
16:40 – 16:55	TBD Short talk
16:55 – 17:20	Round Table on Today's Lessons Learned
17:20 – 19:00	Poster Session 1 (Conference Center - with beverages)

#### Friday, April 5, 2024 (continued)

19:00 – 21:00 Dinner (Sicilian Buffet on Titanic Terrace with Ortigia Sea View)

21:00 – 22:00 Social Hour

#### Saturday, April 6, 2024

07:30 - 09:00	Breakfast Buffet (Nesos Restaurant)	
	Session 3: Delivery Chemistry Chair: Masad Damha, McGill University, Canada	
09:00 – 09:25	Lipidated conjugates for CNS delivery Anastasia Khvorova, University of Massachusetts, USA	
09:25 – 09:50	Chemical evolution of artificial peptide carriers for nucleic acid delivery Ernst Wagner, Ludwig-Maximilian-University of Munich, Germany	
09:50 – 10:15	TBD	
10:15 – 10:45	Coffee Break	
10:45 – 11:10	Muscle targeted centyrin-siRNA conjugates as substrate reduction therapy for Pompe Disease Sukumar Sakamuri, Aro Biotherapeutics, USA	
11:10 – 11:25	TBD Short talk	
11:25 – 11:40	TBD Short talk	
11:40 – 11:55	TBD Short talk	
11:55 – 14:00	Lunch (Nesos Restaurant or Latomie Terrace, depending on weather)	
	Session 4: New Delivery Strategies Chairs: Ernst Wagner, Ludwig-Maximilians-Universität, Germany	
14:00 – 14:25	Recent Discoveries in ExtraHepatic Delivery of RNA Cargoes Pete Smith, ReNegade, USA	
14:25 – 14:50	<b>Design and Evaluation of Novel ionizable Lipids for RNA Delivery</b> Pad Chivukula, Arcturus Therapeutics, USA	
14:50 – 15:05	<b>TBD</b> Cosmin Mihai, Nvelop, USA	
15:05 – 15:20	<b>TBD</b> Akin Akinc, Aera Tx, USA	
15:20 – 15:50	Coffee Break	
15:50 – 16:15	TBD	
16:15 – 16:30	LNP delivery Guarav Sahay, Oregon State University, USA	
16:30 – 17:00	Just a Little Delivery Reality Check Paul Burke, Burke Bioventures LLC, USA	
17:00 – 18:30	Poster Session 2 (Conference Center with beverages)	
18:30 – 21:00	Dinner (Nesos Restaurant)	
21:00 – 22:00	Social Hour	

#### Sunday, April 7, 2024

07:30 – 09:00	Breakfast Buffet (Nesos Restaurant)
	Session 5: Non-Viral and Viral Gene Therapy Chairs: Matt Stanton, Generation Bio, USA
09:00 – 09:25	<b>AAV delivery</b> Dirk Grimm, Heidelberg University Hospital, Germany
09:25 – 09:50	A Modular, Antibody-Based AAV Retargeting Platform For Efficient And Specific <i>In Vivo</i> Gene Delivery Leah Sabin, Regeneron, New York, USA
09:50 – 10:15	DNA LNP delivery Matt Stanton, Generation Bio, USA
10:15 – 10:45	Coffee Break
10:45 – 11:10	Engineering Exosomes to Enable and Create Improved Genetic Medicines Tony De Fougerolles, Evox Therapeutics Limited, United Kingdom
11:10 – 11:35	Targeting mRNA LNPs to New Cell types Stefaan De Koker, Etherna, Belgium
11:10 – 11:35 11:35 – 12:00	· · · · · · · · · · · · · · · · · · ·
	Stefaan De Koker, Etherna, Belgium  LNP Structure
11:35 – 12:00	Stefaan De Koker, Etherna, Belgium  LNP Structure Jay Kulkarni, Nanovation Therapeutics, Canada
11:35 – 12:00 12:15	Stefaan De Koker, Etherna, Belgium  LNP Structure Jay Kulkarni, Nanovation Therapeutics, Canada  Pick up boxed lunch (Hotel Lobby)
11:35 – 12:00 12:15 12:30 – 17:30	Stefaan De Koker, Etherna, Belgium  LNP Structure Jay Kulkarni, Nanovation Therapeutics, Canada  Pick up boxed lunch (Hotel Lobby)  Buses leave for sightseeing excursion to Roman ruins and Old Town Siracusa
11:35 – 12:00 12:15 12:30 – 17:30 18:00 – 18:10	Stefaan De Koker, Etherna, Belgium  LNP Structure Jay Kulkarni, Nanovation Therapeutics, Canada  Pick up boxed lunch (Hotel Lobby)  Buses leave for sightseeing excursion to Roman ruins and Old Town Siracusa  Poster Awards  Keynote Talk 2 The World of LNPs

#### Monday, April 8, 2022

07:30 – 09:00	Breakfast Buffet (Nesos Restaurant)
09:00- 12:00	Departures