

# Delivery of oligonucleotide pharmaceuticals

Monday 28<sup>th</sup> and Tuesday 29<sup>th</sup>, October 2024

Organized by:

Novo Nordisk Foundation Center of Optimized Oligo Escape and Control of Disease (COE)

HCØ, Universitetsparken 5, 2100 København, Aud04

## Day 1: 28-10-2024

**8.30-8.55 Arriving and coffee and light breakfast**

8:55-9.00 **Welcome – Nikos S. Hatzakis**

9.00-9.15 Welcome to UCPH by Jesper Wengel (university of Copenhagen)

**Session Chair Tom Kirchhausen (Harvard Medical School & Boston Children's Hospital)**

9.15-10.10 Marino Zerial – Harnessing endocytosis to improve the delivery of oligonucleotide-based drugs (Human Technopole)

10.10-10.30 Short talk: Unnur Jóna Björgvinsdóttir - Localized, sustained delivery of antisense oligonucleotides via the novel, injectable biomaterial bioMATA (Technical University of Denmark)

10.30-11.00 **Coffee break**

**Session Chair Knud J. Jensen (University of Copenhagen)**

11.00-11.55 Anna Salvati - Nanomedicine modifications in biological fluids, interactions with cell receptors and uptake mechanisms (University of Groningen)

11.55-12.50 Hanne Mørck Nielsen - Cell-penetrating peptides as excipients in drug delivery (University of Copenhagen)

12.50-14.20 **Lunch break and poster session in the South end of Vandrehallen**

**Session Chair Nikos S. Hatzakis (University of Copenhagen)**

14.20-15.15 Jørgen Kjems - Chemically enhanced function and delivery system for RNA therapeutics (Aarhus University)

15.15-15.35 Short talk: Stefan Vogel - From lipidated Oligonucleotides to Programmable loading of Extracellular Vesicles with mRNA (University of Southern Denmark)

15.35-16.00 **Coffee break**

**Session Chair Nikos S. Hatzakis (University of Copenhagen)**

- 16.00-16.55 Camilla Foged – title TBA (University of Copenhagen)
- 16.55-17.15 Short talk: Artu Breuer - High-Throughput Single-Particle Analysis of Lipid Nanoparticle Biophysical Properties: A Novel Approach for Enhancing LNP Therapeutic Design (University of Copenhagen)
- 17.15-17.20 **Wrap up day 1 (Nikos S. Hatzakis)**
- 18.30-20.00 Dinner for registered participants at Food Club Nørrebro**

## **Day 2: 29-10-2024**

- 9.15-9.30 **Coffee and light breakfast**
- 9.30-9.35 **Welcome to day 2 – Nikos S. Hatzakis**  
**Session chair M. Carmo-Fonseca (University of Lisbon)**
- 9.35-10.30 Adrian Krainer – Using unformulated ASOs for neurology and neuro-oncology indications (Cold Spring Harbor Laboratory)
- 10.30-10.50 Anders Wittrup - Live cell imaging of endosomal damage and endosomal escape of RNA therapeutics (Lund University)
- 10.50-11.10 Afaf El-Sagheer - Artificial neutral backbones for therapeutic oligonucleotides gymnotic delivery (University of Southampton)
- 11.10-11.40 **Coffee break**  
**Session chair M. Carmo-Fonseca (University of Lisbon)**
- 11.40-12.35 Tom Kirchhausen – Endosomal escape (Harvard Medical School & Boston Children's Hospital)
- 12.35-13.05 Round table discussion: Challenges for the future of Oligo Delivery by Nikos S. Hatzakis and plenary speakers.
- 13.05-13.10 Wrap-up and goodbye**
- 13.10 (Take home) lunch**

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