## **Applied Biophysics Forum** in Drug Delivery - Agenda

## Day 1: 11.00 - 19.00

	11:35	Registrations and Light Lunch		
	11:50	WELCOME		
Opening Session Chaired by Daan Crommelin, Utrecht University	12:00	Where are we with LNP drug development field?	Camilla Foged, University of Copenhagen	
	12:25	Where are we with LNP biophysical characterization field?	Heinrich Haas, Mainz University	
	12:50	Formulation from small to large scale: the challenges of translation & differences.	Andreas Wagner, Polymun Scientific	
	13:15	Break		
State of the art in mRNA delivery vectors Chaired by Sven Even Borgos, SINTEFF	13:25	NanoProfiler: A platform to better understand nanoparticle- based delivery and correlate in vitro to in vivo data	Michael Munson, AstraZeneca	
	13:45	Rigorous characterization as key factor for developing the next-generation of LNP technologies	Dominik Witzigmann, NanoVation Therapeutics	
	14:05	Structure-function complexity when RNA comes in focus.  Specifics of RNA structure and interactions	Eric Ennifar, CNRS	
	14:25	Flash poster presentations		
	14:45	Panel Q&A		
	15:15	Refreshments		
Established methods and case study examples Chaired by Hanna Barriga, Karolinska Institute	15:45	Analytical guidelines and how to address challenges in support of product/process development	Niels Delamotte, etherna	
	16:05	Analytical orthogonality and advanced separation techniques for LNPs	Sven Even Borgos, SINTEF	
	16:25	Scattering methods to inform on size, size homogeneity and particle concentration	TBC	
	16:45	Small angle scattering understanding the structure of lipid nanoparticles	Federica Sebastiani, University of Copenhagen	
	17:05	Panel Q&A		
	17:35	Poster exhibition and networking		
	19:00	On-campus buffet dinner & mingle		

## Day 2: 08.10 - 13.20

	08:10	WELCOME	
Biophysical and computational approaches Chaired by Michael Munson	08:35	Dynamic information on colloids and mRNA structure from DOSY NMR	TBC
	08:55	Computational approaches to modelling phase transition in lipid nanoparticles	Rainer Böckmann, Friedrich Alexander University Erlangen-Nürnberg
	09:15	The whole is greater than the sum of its parts: Calorimetric analysis of mRNA and mRNA-LNPs	Natalia Markova, Malvern Panalytical
	09:35	Panel discussion	
	10:05	Coffee break	
Emerging technologies with case study examples Chaired by Heinrich Haas	10:35	Single-particle studies with Sparta	TBC
	10:55	Fluorescence cross-correlation spectroscopy- characterization of RNA-LNP assembly structure	Dominik Witzigmann, NanoVation Therapeutics
	11:15	Langmuir studies on surfaces	Eric Ennifar, CNRS
	11:35	Industrial perspective: translating mRNA LNPs from discovery to development	Marianna Yanez Arteta, AstraZeneca
	11:55	Panel Q&A	
Natalia Markova	12:20	Closing remarks	
	12:30	Light lunch	

This agenda is subject to change. Please see:

https://events.malvernpanalytical.com/biophysics-forum

for the latest, most up-to-date agenda

