

**2<sup>nd</sup> BeNeLux & France CRS Local Chapter Meeting,  
15-16<sup>th</sup> October 2025 Leiden, The Netherlands**

**Wednesday 15<sup>th</sup> October, 2025**

**12:00-13:00 Registration**

**13:00-13:10 Opening session: CRS BeNeLux France: overview of activities**  
**Giovanna Lollo, President of the CRS BNLF**

**Session 1: Innovative Nanomedicines for RNA Therapeutics**

*Chaired by Anne Rodallec & Kasia Zdunczyk*

- 13:10-13:40 **Invited Speaker: Raymond Schiffelers** University Medical Center Utrecht, The Netherlands  
*A synthetic delivery system for in vivo CAR T cell engineering with DNA*
- 13:40- 13:55 **Charlotte Hegeman** **Utrecht University, The Netherlands**  
*Modulating binding affinity of aptamer-based loading constructs enhances EV-mediated CRISPR/Cas9 delivery*
- 13:55-14:10 **Pol Escudé** **University Medical Center Utrecht, The Netherlands**  
*Lipid nanoparticle-mediated mRNA delivery efficacy in the liver is dependent on feeding status*
- 14:10-14:25 **Mengshan Liu** **Leiden University, The Netherlands**  
*Polymeric mRNA Nanoparticulate Vaccines effectively Induce Antigen-specific CD8+ T Cells Response ex vivo*
- 14:25-14:40 **Khair Alhareth** **Université Paris Cité, France**  
*Machine learning for predicting size and encapsulation efficiency of mRNA-loaded LNPs, prepared by microfluidics and post-encapsulation approach.*
- 14:40-15:00 **Gold sponsor presentation: Malvern Panalytical**
- 15:00-15:10 Silver sponsor lightning talks: Tebubio & Nanoscale Metrix

**15:10-16:00 Coffee break, Poster viewing and Networking**

## Session 2: Functions of Phospholipids in Lipid Nanomedicine

Chaired by Aida Varela Moreira & Mengshan Liu

16:00-16:30 **Simon Drescher**, Phospholipid Research Center, Germany

*An introduction of the Phospholipid Research Center*



Phospholipid Research Center

**Naomi Benne**

Utrecht University, The Netherlands

*Mechanistic studies into the function of tolerogenic liposomes*

16:30-17:00 **Invited Speaker: Geraldine Piel**

University of Liege, Belgium

*Advancing Lipid Nanoparticle Platforms: Replacing PEG for Enhanced Safety and Delivery Efficiency*

17:00-17:15 **Xinyu Ma**

University of Groningen, The Netherlands

*Effect of Liposome Rigidity on Corona Formation and Its Implications for Uptake by Cells*

**17:15-17:30 Coffee break, Poster viewing and Networking**

17:30-17:45 **Renzo A. Knol**

Leiden University, The Netherlands

*Lipid stereochemistry of lipid nanoparticles significantly influences mRNA expression levels in vivo*

17:45-18:00 **Mans Broekgaarden**

Grenoble-Alpes University, France

*Engineering liposomes for light- and X-ray controlled drug delivery*

18:00-18:30 **Gold sponsor presentation: NanoFCM**



**19:00-23:00 Dinner & Drinks hosted by the Congress**

Thursday 16<sup>th</sup> October, 2025

### Session 3: Nanomedicine for Inflammatory and Pulmonary Therapies

Chaired by Mathieu Repellin & Khair Alhareth

09:00-09:30	<b>Invited Speaker: Elias Fattal</b>	University of Paris-Saclay, France
	<i>Harnessing nanoparticles for effective treatment of inflammatory diseases</i>	
09:30-09:45	<b>Myléva Dahan</b>	University of Lyon, France
	<i>Targeted Delivery of Hydrogel-associated Nanoparticles for Inflammatory Bowel Disease</i>	
09:45-10:00	<b>Zeineb Ibn Elfekih</b>	University of Montpellier, France
	<i>Optimization of the nebulization parameters for enhanced pulmonary delivery of extracellular vesicles</i>	
10:00-10:15	<b>Tuan Nghia Dinh</b>	Université de Liège, Belgium
	<i>Tailored design of lipid components of liposomes containing ciclesonide and indacaterol maleate for improved pulmonary delivery</i>	
10:15-10:35	<b>Gold Sponsor presentation – Unchained Labs</b>	



10:35-11:00 Coffee break, Poster viewing and Networking

### Session 4: Precision Medicines for Cancer

Chaired by Chiara Bastiancich & Axel Kattar

11:00-11:30	<b>Invited Speaker: Anuja Lipsa</b>	Luxembourg Institute of Health, Luxembourg
	<i>Functional Precision Medicine in High-Grade Glioma: Harnessing Patient-Derived Platforms for High-Throughput Drug Screening and Personalized Therapeutic Strategies</i>	
11:30-11:45	<b>Dennis Aschmann</b>	University of Amsterdam, The Netherlands
	<i>Charge-Reversed Lipid Nanoparticles Containing Metal–Organic Cages for In Vivo Anti-Cancer Treatment</i>	
11:45-12:00	<b>Seth Fobian</b>	Amsterdam UMC, The Netherlands
	<i>Investigating the delivery of PD-L1-targeted immunoliposomes in a dynamic cervical cancer-on-a-chip model</i>	
12:15-12:30	<b>Anne Rodallec</b>	Aix-Marseille University, France
	<i>Model-driven scheduling of nanocarriers: application to an anticancer polymer prodrug administered subcutaneously</i>	
12:30-12:40	Silver sponsor lightning talks: Sparta Biodiscovery & ChemSPX	

12:40 -14:00 Lunch, Poster viewing and Networking

### Session 5: Innovative Vaccine Delivery Approaches

Chaired by Koen van der Maaden & Léa Guerassimoff

14:00-14:30	<b>Invited Speaker: Anne Moore</b>	University College Cork, Ireland
	<i>Fourteen million COVID-19 deaths averted but 13 million zero dose children. Immuno-pharmaceutical approaches to addressing vaccine accessibility.</i>	
14:30-14:45	<b>Beau van Hulst</b>	Leiden University, The Netherlands
	<i>Novel dissolvable microneedle designs containing self-adjuvanting-peptide vaccines effectively induce cancer-specific T cells</i>	

- 14:45-15:00 **Agata Zamborlin** Ghent University, Belgium  
*Overcoming alveolar macrophages to unlock lung delivery of lipid nanoparticles*
- 15:00-15:15 **Katarzyna Zduńczyk** Leiden University, The Netherlands  
*Clearing the Way: 3D Assessment of Jet Injection Delivery in Optically Cleared Ex Vivo Human Skin.*
- 15:15-15:30 **Oscar Escalona** Leiden University, The Netherlands  
*Exploring the nano-bio interface between mRNA-lipid nanoparticles and macrophages*

**15:30-16:00 Coffee break, Poster viewing and Networking**

*Meeting of poster judges*

**Session 6: Targeted drug activation and delivery**

*Chaired by Seth Fobian & Agata Zamborlin*

- 16:00-16:30 **Invited Speaker: Sylvester Bonnet** University of Leiden, The Netherlands  
*Ruthenium-based photoactivated chemotherapy: looking for the best clinical application*
- 16:30-16:45 **Ahmed Abdelhamid** Grenoble-Alpes University, France  
*Engineering nanoliposomes loaded with high-Z elements for enhanced chemoradiation therapy*
- 16:45-17:00 **Lea Guerassimoff** Ghent University, Belgium  
*Photothermal transport for guiding nanoparticles through the vitreous humor*
- 17:00-17:15 **Quim Peña** RWTH Aachen University Hospital, Germany  
*Size-tunable metal-coordinating micelle platform for image-guided drug delivery to tumors and lymph nodes*
- 17:15-17:30 **Mainak Banerjee** Université de Strasbourg, France  
*Polymer-Conjugated Targeted Protein Degradation for tumor-selective protein degradation*

**17:30-18:00 Closing session: Open discussion and awards ceremony**

*Meeting of presentation judges*

**Sponsored by:**



**Phospholipid Research Center**

