

Session 1

8:45 – 10:30

Moderators: Roy van der Meel and Bárbara Mesquita

- 08:45-09:00 Opening and Meeting overview by Roy van der Meel (Eindhoven)
- 09:00-09:45 Koen Raemdonck (Ghent): Repurposing cationic agents to improve cytosolic delivery of membrane-impermeable cargo
- 09:45-10:00 Pednekar Unal (Twente): 3D embedded *in vitro* model mimicking pancreatic tumor stroma to study nanomedicine
- 10:00-10:15 Mattia Tiboni (Urbino Carlo Bo): A 3D printed intravaginal ring for the treatment of vulvovaginal candidiasis
- 10:15-10:30 The CRS BNLF Local Chapter by Giovanna Lollo (Lyon) and the Mentorship Program by Chiara Bastiancich (Marseille)
- 10:30-10:45 Coffee break

Session 2

10:45 – 12:00

Moderators: Giovanna Lollo and Chiara Bastiancich

- 10:45-11:30 Rob Steendam (InnoCore):
- 11:30-11:45 Mariona Estapé (Utrecht): Impact of serum heat inactivation on (lipid) nanoparticle uptake and nucleic acid delivery efficiency
- 11:45-12:00 Valentina Andretto (Lyon): Orally administered nanocomposites for the localized treatment of inflammatory bowel diseases
- 12:00-13:00 Lunch break

Session 3

13:00 – 14:15

Moderators: Roy van der Meel and Chiara Bastiancich

- 13:00-13:45 Patrick van Rijn (Groningen): Hydrogel-based nanostructures for biomedical applications
- 13:45-14:00 Yasmine Labrak (Louvain): Nanomedicines to stimulate the differentiation of oligodendrocyte progenitor cells
- 14:00-14:15 Ahmed Mostafa (Twente): Targeting the tumor microenvironment with co-delivery using electrospun nanofibers: A proof-of-concept study in 3D tumor hetero-spheroids

Quiz

14:15 – 14:45

Session 4

14:45 – 16:00

Moderators: Giovanna Lollo and Mai Vuong

- 14:45-15:00 Marion Sicot (Angers): Lipid nanocapsule hydrogel as a targeted, local, specific and sustained drug delivery system for the treatment of glioblastoma
- 15:00-15:15 Cristina Casadidio (Utrecht): 3D multicellular tumor spheroids as *in vitro* model for tracking polyplexes penetration in cancer therapy
- 15:15-16:00 Carmen Arigita (Janssen Pharmaceuticals):
- 16:00-16:30 Coffee break (Zoom breakout rooms)

Frontiers Special Issue 16:30 – 17:00

Pitch Session 17:00 – 18:00

Moderators: Bárbara Mesquita, Mai Vuong and Roy van der Meel

- 17:00-17:30 Pitch session part 1
- Manon Berger (Liege): Amphiphilic N-vinyl pyrrolidone-based polymers as PEG alternatives to avoid blood proteins adsorption around liposomes
- Ange Ilangala Booka (Liege): Evaluation of the physicochemical characteristics of pH sensitive liposome formulations for effective endosomal escape and cytosolic delivery
- Mathieu Repellin (Lyon): Intracellular fate of hyaluronic acid-based nanoparticles tracked at transmission electron microscopy using Alcian blue staining
- Valentina Francia (Utrecht): Exploring the Biological Interactions of Lipid Nanoparticles for Gene Therapy
- Jihane Mzoughi (Strasbourg): Time-programmed release of model drugs from rolled up biocapsules
- Nathan Koch (Liege): Influence of API physico-chemical properties on amorphization capacity of several mesoporous silica loading methods
- 17:30-18:00 Pitch session part 2
- Riccardo Pedron (Strasbourg): Programmed drug release via rolled up biopolymer capsules
- Merymen Boukadida (Lyon): Design of imprinted material for the extraction of Histamine
- Noémie Penoy (Liege): Encapsulation of two API in liposomes for pulmonary administration and produced by an innovative supercritical method
- Clélia Mathieu (Paris): Cellular and subcellular targeting of TRAP1 as a new therapeutic approach for cancer treatment
- Chloé Parulski (Liege): How do infill density and polymer composition of tablets produced by hotmelt extrusion coupled with Fused Deposition Modeling 3D printing influence the dissolution profile of a BCS II molecule?
- Leila Arabi (Mashad): Effective combination therapy in a mice B16F10 model of melanoma
- Olivier Jennotte (Liege): Development of amorphous solid dispersions of cannabidiol with an increase of the aqueous solubility: influence of the carrier, the hot-melt extrusion parameters and the use of a crystallization inhibitor

Awards & closing remarks 18:00 – 18:15