

Day 1 – Monday, November 11, 2019

- 07:00-08:30 **Registration**
- 08:30-08:45 **Ingmar Hoerr: Welcome**
- 08:45-09:45 **Keynote Speaker: Matthias Hentze:** Hidden treasures of the RNA world: RBPs from moonlighting to riboregulation
- 09:45-12:20 **mRNA Biology & Regulation** / Chair: Jacek Jemielity
- 09:45-10:05 **Niek Sanders:** Small-molecule-responsive mRNAs
- 10:05-10:25 **Jacob Becraft:** A synthetic biology platform for next generation “smart” mRNAs
- 10:25-10:45 **Joanna Kowalska:** Alternate endings: towards understanding of unconventional RNA caps
- 10:45-11:00 **Coffee Break**
- 11:00-11:20 **Hadi Valadi:** Linkage between LNP-mRNA Escape and Packaging into Evs - mRNA loading into Evs and in vivo delivery
- 11:20-11:40 **Chantal Pichon:** Engineered yeast mutants for accumulation and package mRNA of interest: a proof of concept study
- 11:40-12:00 **Piotr Kowalski:** Engineering mRNA nanotherapeutics for selective delivery and sustained translation
- 12:00-12:20 **Juozas Šiurkus:** Latest State-of-Art Disposable Bioprocesses for Production of High Quality Recombinant Enzymes for mRNA and DNA Workflows
- 12:20-12:50 **Short Presentations** / Chair: Michael D. Buschmann
- 12:20-12:30 **Anton McCaffrey:** mRNA Expressing Cytosine and Adenine Base Editors Mediate Efficient Base Corrections In Vitro and In Vivo
- 12:30-12:40 **Monica Wu:** Understanding the nature and source of dsRNA by-products during in vitro transcription.
- 12:40-12:50 **Aleks Schein:** Extra-long mRNA for treatment of Duchenne Muscular Dystrophy
- 12:50-13:50 **Lunch & Poster Session**
- 13:50-16:50 **Delivery** / Chair: Colin Pouton
- 13:50-14:10 **Dan Peer:** A Modular Platform for RNA Therapeutics
- 14:10-14:30 **Hidetaka Akita:** An Intracellular responsive lipid like material (ssPalm) as a RNA delivery platform
- 14:30-14:50 **Phil Santangelo:** Mucosal delivery of mRNA and applications to disease prevention
- 14:50-15:10 **Rein Verbeke:** Lipid nanoparticles co-loaded with mRNA and glycolipid adjuvants (GALSOMES) induce pluripotent antitumor immunity through conventional T cells and natural killer T cells
- 15:10-15:30 **Hana Totary-Jain:** Effective delivery of mRNA using self-assembled peptide-based nanoparticles
- 15:30-15:50 **Thomas D. Madden:** Characterizing the therapeutic application of messenger RNA-lipid nanoparticles
- 15:50-16:10 **Coffee Break**
- 16:10-16:30 **Andreas Wagner:** Guiding RNA formulations from laboratory into clinical trials. Lessons learned from development and optimization of liposomal/LNP formulations.
- 16:30-16:50 **Norbert Maurer:** Recent Advances in Lipid Nanoparticle-Mediated Drug Delivery – A CDMO perspective
- 16:50-18:10 **Therapeutic Area: mRNA Therapeutics** / Chair: Friedrich Metzger
- 16:50-17:10 **Stefan Hauser:** Messenger RNA as novel treatment strategy for Hereditary Spastic Paraplegia Type 5 (SPG5)
- 17:10-17:30 **Joseph Rosenecker:** Self-assembled peptide-ploxamine nanoparticles enable in vivo genome restoration of the CFTR- gene in murine airways: using mRNA for transient expression of transposase
- 17:30-17:50 **James Wilson:** mRNA for Treating Liver Metabolic Disease
- 17:50-18:10 **Janos Szebeni:** Infusion reactions as a safety barrier in RNA therapy: animal models for prediction and prevention
- until 20:00 **Poster Session & Exhibition**
- 20:00 **Networking Reception**

Day 2 – Tuesday, November 12, 2019

- 08:30-09:50** **Therapeutic Area: Prophylactic Vaccines** / Chair: Norbert Pardi
- 08:30-08:50 **Karin Loré:** Understanding Innate Immune Activation by mRNA Vaccines for Induction of Strong B Cell Responses
- 08:50-09:10 **Lori Panther:** Phase 1 Trial of a mRNA Vaccine Against Cytomegalovirus (CMV) Infection
- 09:10-09:30 **Drew Weissman:** Nucleoside-modified mRNA-lipid nanoparticle vaccine platform
- 09:30-09:50 **Anna K. Blakney:** Big is beautiful: Enhanced saRNA delivery and immunogenicity by a higher molecular weight, bio-reducible, cationic polymer
- 09:50-10:10** **Coffee Break**
- 10:10-11:30** **Therapeutic Area: Oncology** / Chair: Kristiaan Thielemans
- 10:10-10:30 **Özlem Türeci:** mRNA-based targeted immunotherapy
- 10:30-10:50 **Zwi Berneman:** Therapeutic vaccination of cancer patients with dendritic cells electroporated with Wilms' tumor 1 (WT1) mRNA: Clinical responses, increased survival and correlation with WT1-specific T-cell response induced by the transfected dendritic cells
- 10:50-11:10 **Ulrike Gnad-Vogt:** Next generation mRNA cancer vaccines and RNA- based intratumoral immunomodulation
- 11:10-11:30 **Matthias Stephan:** Developing T-cell therapies for the masses
- 11:30-12:10** **Presentations of small companies** / Chair: Katalin Karikó
- 11:30-11:35 **Anitha Thomas:** Precision NanoSystems, Canada
- 11:35-11:40 **Carmen Plasencia:** AROMICS, Spain
- 11:40-11:45 **Daniel Tondera:** Pantherna Therapeutics, Germany
- 11:45-11:50 **John Ramunas:** Rejuvenation Technologies, USA
- 11:50-11:55 **Guido Krupp:** AmpTec, Germany
- 11:55-12:00 **Ingo Nagler:** BIA, Slovenia
- 12:00-12:05 **Shiro Akinaga:** AccuRna, Japan
- 12:05-12:10 **Stefano Croce:** Baseclick, Germany
- 12:10-13:10** **Lunch & Poster Session**
- 13:10-14:10** **Regulatory Session**
- 14:10-15:30** **Short Talks** / Chair: Roland Brock
- 14:10-14:20 **Harry Al-Wassiti:** Passive targeting to the spleen by altering the physicochemical properties of lipid nanoparticles
- 14:20-14:30 **Hangwen Li:** A novel Core-shell structure LPP delivery platform for mRNA medicine
- 14:30-14:40 **Christoph Rademacher:** Targeted delivery to human Langerhans cells
- 14:40-15:00** **Coffee Break**
- 15:00-15:10 **Bo Hansen:** Preclinical evaluation of a modified mRNA for the treatment of OTC deficiency
- 15:10-15:20 **Caroline Woo:** Advancing the development of LNP-encapsulated mRNA therapeutics for pulmonary diseases
- 15:20-15:30 **Ajit Magadam:** mTORC1 Suppressor Modified mRNA Attenuated Cardiac Hypertrophy and Fibrosis in the Failing Heart
- 15:30-16:00** **Poster Prize Awarding and Farewell**