

Dr. Dominik Witzigmann
Co-Founder & Chief Executive Officer (CEO)
NanoVation Therapeutics (NTx)

Title & Abstract

Genetic medicines enabled by lipid nanoparticles – A breakthrough technology revolutionizing medicine

The clinical success of RNA therapies and vaccines utilizing lipid nanoparticle (LNP) technology has marked the beginning of a transformative era in medicine. With many genetic medicines now on the horizon, we are witnessing the potential to treat, and even cure, major diseases. One of the greatest challenges, however, remains: Delivery technologies that can safely and effectively transport nucleic acids to a variety of tissues. To overcome this barrier to nucleic acid delivery, the development of fit-for-purpose LNP technologies for systemic as well as local administration is required. This presentation will explore the key challenges and opportunities in the field of genetic medicines, highlighting the key role of LNP technology in shaping the future of RNA therapeutics.

Bio

Dominik obtained his Ph.D. in Pharmaceutical Technology from the University of Basel in Switzerland. Following research projects at the University College London (toxicity), German Cancer Research Center (RNAi and cancer), University of Basel (targeted nanomedicines and DNA delivery) and the University of Zurich (mRNA-based genome editing), Dominik joined the team of Prof. Pieter Cullis at the University of British Columbia to focus on RNA delivery utilizing lipid nanoparticle (LNP) systems. Dominik had leadership roles within the NanoMedicines Innovation Network (NMIN - a Canadian Networks of Centres of Excellence), he co-founded and led NMIN's NanoCore to support >30 projects with advanced nucleic acid delivery technologies, and he served as a Board Member of the Controlled Release Society Focus Group "Gene Delivery and Genome Editing". Dominik has a proven track record in nanomedicines enabling tissue as well as cell specific drug and gene delivery. To translate next-generation LNP technologies into the clinic, Dr. Witzigmann co-founded and leads the LNP-nucleic acid company NanoVation Therapeutics.

www.nanovationtx.com | 2405 Wesbrook