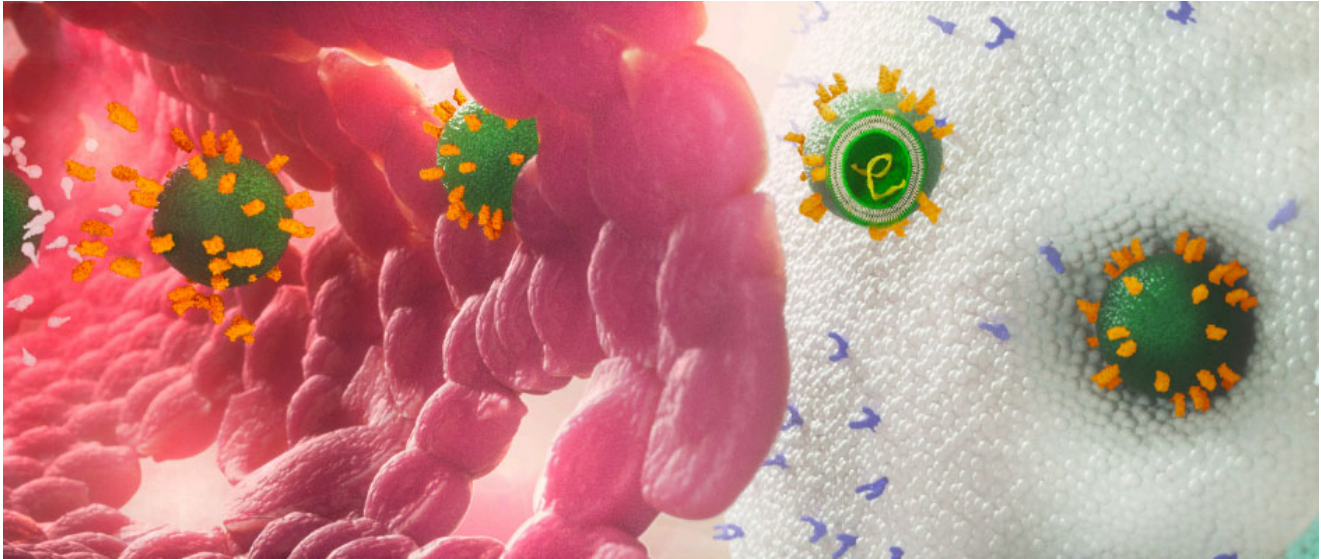


About Us - Acuitas Therapeutics Company in Vancouver, BC

 acuitastx.com/company/our-journey



OUR JOURNEY

Acuitas is a private company based in Vancouver, British Columbia. It was founded in February 2009 by Dr. Thomas Madden, Dr. Pieter Cullis and Dr. Michael Hope. Acuitas specializes in the development of delivery systems for nucleic acid therapeutics based on lipid nanoparticles (LNP).

Today, Acuitas partners with a range of pharmaceutical and biotechnology companies, academic institutes and thought leaders from around the world to advance nucleic acid therapeutics to the clinic and to the marketplace. Our vision is to provide delivery technology that fully enables nucleic acid medicines and to thereby address unmet clinical needs.

Acuitas is globally known as a leader in the field of lipid nanotechnology. The team, led by President & CEO, Dr. Thomas Madden, is made up of a diverse group of highly experienced scientists and technical and administrative professionals – all of whom are committed to excellence in their respective roles in the company.

Dr. Madden obtained his BSc. and Ph.D. in Biochemistry from the University of London, U.K. He has held several senior academic positions and is a Fellow of the American Institute for Medical and Biological Engineering (AIMBE).

Acuitas' scientists have synthesized over 500 novel cationic lipids and have evaluated these novel compounds in LNP. This evaluation characterizes the potency and safety of the LNP carriers for the delivery of nucleic acid payloads including siRNA, mRNA and DNA.

The team has undertaken the biophysical characterization of such novel LNP systems and has conducted correlation analyses to determine which structural and biophysical properties of the cationic lipids are critical for activity and safety, and uses this knowledge to guide subsequent lipid and LNP development. This rational design and screening approach has resulted in the identification of LNP compositions with a greatly improved potency and therapeutic index. In collaboration with other scientists, the team has also established the mechanism by which LNP carriers are taken up by cells.

Importantly, Acuitas LNP systems are clinically validated. An LNP developed by Acuitas is used by Alnylam Pharmaceuticals for Onpattro™. Onpattro™ was approved in 2018 in the U.S. and Europe for the treatment of transthyretin amyloidosis, a rare and otherwise fatal genetic disease characterized by an abnormal buildup of a protein called amyloid in the body's organs and tissues. Onpattro™ is the first in a new class of drugs, called RNAi therapeutics, to receive regulatory approval.

Acuitas continues to work with high-profile international partners, providing our LNP delivery technology to enable new drugs based on nucleic acid therapeutics. This includes partnering with BioNTech/Pfizer for COMIRNATY®, a COVID-19 vaccine that is being administered to protect people around the world. COMIRNATY® has received full approval for use by the FDA in the U.S. and by Health Canada and has been authorized for Emergency Use in multiple jurisdictions around the world. COMIRNATY® has demonstrated the potential for mRNA-LNP vaccines to protect against a serious viral disease, and Acuitas is now working with academic and industry partners to develop vaccines against other challenging infectious diseases, including malaria, HIV and tuberculosis. Together with our partners, we are also evaluating mRNA-LNP immunomodulation therapies to treat cancer.