

Thomas D. Madden, Ph.D. – Biography

President and CEO of Acuitas Therapeutics, Dr. Thomas D. Madden is a world-renowned expert in the area of nanotechnology. Acuitas Therapeutics is currently working with several high-profile international partners, providing its delivery technology (lipid nanoparticles) to enable new drugs based on nucleic acid therapeutics. These partnerships include BioNTech (which partners with Pfizer), CureVac and Imperial College London, where the Acuitas delivery technology is required to develop effective messenger RNA vaccines for COVID-19. (To understand more about these partnerships, mRNA and lipid nanoparticles, please see the Acuitas Therapeutics backgrounder.)

Dr. Madden obtained his BSc. and Ph.D. in Biochemistry from the University of London, U.K. He has held several senior academic and industry positions including Assistant Professor in Pharmacology at the University of British Columbia and Senior Director, Technology Development and Licensing at Tekmira Pharmaceuticals (formerly INEX Pharmaceuticals).

At Tekmira Pharmaceuticals, Dr. Madden was responsible for the product development of several liposomal anticancer agents including Marqibo[™] (liposomal vincristine), Alocrest[™] (liposomal vinorelbine) and Brakiva[™] (liposomal vinorelbine). All of these products were subsequently licensed to Talon Therapeutics.

Dr. Madden co-founded Acuitas Therapeutics in February 2009 and has guided the company to a leadership position in the application of lipid nanoparticle (LNP) technology for the delivery of nucleic acid therapeutics.

In addition to the current partnerships with CureVac and BioNTech, Dr. Madden has headed the development of the cationic lipid MC3 and the LNP carrier 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 condition 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.

While Dr. Madden is respected globally for his professional expertise and achievements, he has also earned a reputation for his collaborative approach. Dr. Madden credits the success of Acuitas Therapeutics and its exceptional standing on the world stage to the team's commitment to excellence and the company's culture of cooperation internally and externally.

Dr. Madden has over 60 publications in peer-reviewed journals relating to LNP technology and the development of pharmaceutical products, including recent publications in Nature. In 2020, Dr. Madden was made a Fellow of the American Institute for Medical and Biological Engineering in recognition of his contributions to the field of nucleic acid delivery.