

UCSD NANOENGINEERING/CHEMICAL ENGINEERING
SEMINAR SERIES

Wednesday, November 8th, 2023
Seminar Presentation: 11:00am - 12:00pm
SME room 248



“Bourbon, Bacon, and Vaccines”

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Abstract: The same molecules that deliver flavor molecules to our taste buds have proven useful in delivering therapeutics to inflamed tissues for treatment of a variety of diseases. Non-natural lipid-based nanocarriers represent one of the most impactful innovations to public health with the approval of the mRNA vaccines for COVID-19. Development of novel bioactive nanocarriers with multifunctional activity represent the next phase in innovative lipid-based drug delivery. However, there is still significant opportunity to implement naturally occurring lipids for drug, gene, and vaccine delivery. This seminar will focus on two products in development for lipid-based immune modulation using both naturally occurring lipids, and an innovative lipid platform with immunomodulatory potential for drug, gene, and vaccine delivery.

Biosketch: Vince Venditto grew up in Philadelphia, PA and is a first-generation college graduate with a BS degree in chemistry from Gettysburg College. Before graduate school, he worked at the NIH National Cancer Institute for two years, then earned a PhD in Chemistry from Texas A&M University. After graduation, he gained additional training at the University of California, San Francisco as an NIH postdoctoral fellow. He started as an Assistant Professor at the University of Kentucky College of Pharmacy in 2015 and is currently an Associate Professor of Pharmaceutical Sciences. His lab focuses on the development of novel drug delivery technologies focused on immune modulation in the context of cardiovascular disease and infectious agents.