

RMB CVRC Seminar

The Robert M. Berne Cardiovascular Research Center Presents

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Redox Modulation and Targeted Drug Delivery for Cardiovascular Disease and Beyond

Redox dysfunction is causally associated with a wide array of human pathologies. Particularly, redox dysfunction promotes the development of cardiovascular disease. However, clinical translation of antioxidant-therapy has yielded underwhelming results. The reasons behind the poor translation of redox-based drugs could be many, we propose that treating localized dysfunction with systemic delivery approaches contributes to the translation failure rates. Our answer is to develop targeted systems to selectively deliver payloads where they are needed. Our long term research aims to change the way we treat arterial disease by: understanding how we can manipulate the redox environment of the vasculature to treat cardiovascular disease; and developing targeted systems using nanotechnology to locally deliver redox-based therapeutics to the diseased arteries. We use novel nanoparticle synthesis techniques and cutting-edge imaging technologies to address our scientific questions developing some new methodologies for vascular injury quantification along the way.

Thursday October 5th, 2023 11:00 AM-12:00 PM MR5 Room 3005

Hosted by: Nick Tsihlis, PhD **Refreshments served**

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