The Robert M. Berne Cardiovascular Research Center Presents

Natasha Sheybani, Phd

Affiliation: Assistant Professor of Biomedical Engineering
Research Director, UVA Focused Ultrasound Cancer Immunotherapy Center,
University of Virginia, Charlottesville, VA

Immuoengineering Next-Generation Cancer Therapies with Focused Ultrasound

Despite the remarkable promise of cancer immunotherapy, a significant fraction of patients with solid tumors are yet unable to realize its unparalleled benefits. In this talk, I will introduce focused ultrasound (FUS) - a promising emerging technology for the non-invasive, non-ionizing, and precisely targeted deposition of acoustic energy into tumor tissues – as a strategy for immuno-modulation and immunotherapy delivery in primary and disseminated cancers of the brain and breast. I will provide an overview of (1) our pre-clinical work at the nexus of FUS, molecular imaging, and cancer immunotherapy and (2) the rich landscape for clinical translation of FUS immunotherapy paradigms here at UVA. Finally, I will highlight some of our emerging efforts to usher FUS into the era of precision medicine by leveraging advanced imaging, liquid biopsy, and artificial intelligence-driven approaches

Thursday December 14th, 2023
11:00 AM-12:00 PM
MR5 Room 3005

**Refreshments served**