



# RMB CVRC Seminar

The Robert M. Berne Cardiovascular Research Center Presents

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### **Immunoengineering 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 14<sup>th</sup>, 2023**  
**11:00 AM-12:00 PM**  
**MR5 Room 3005**

**\*\*Refreshments served\*\***

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