



# RMB CVRC Seminar

The Robert M. Berne Cardiovascular Research Center Presents

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### **MMP-2-Targeted Nanofibers as a Potential Diagnostic and Therapeutic Delivery Vehicle for Abdominal Aortic Aneurysms**

Abdominal aortic aneurysm (AAA) is the most common aortic pathology, and accounts for ~10,000 deaths/year in the United States. While many preclinical therapeutics have shown promise, pharmacological interventions have not shown significant inhibition of AAA enlargement in humans. Conventionally, AAA is diagnosed via ultrasound or computed tomography imaging, but only after significant dilation and tissue damage have occurred. Analysis of aneurysmal tissue reveals increased proteolytic activity in pathological aortas, particularly matrix metalloproteinase 2 (MMP-2), and this occurs early in AAA formation. Our group has developed a MMP-2 targeting nanomaterial that localizes to aneurysmal tissue. The focus of this talk is the development of this technology as a potential diagnostic and therapeutic delivery vehicle.

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**11:00 AM-12:00 PM**  
**MR5 Room 3005**

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