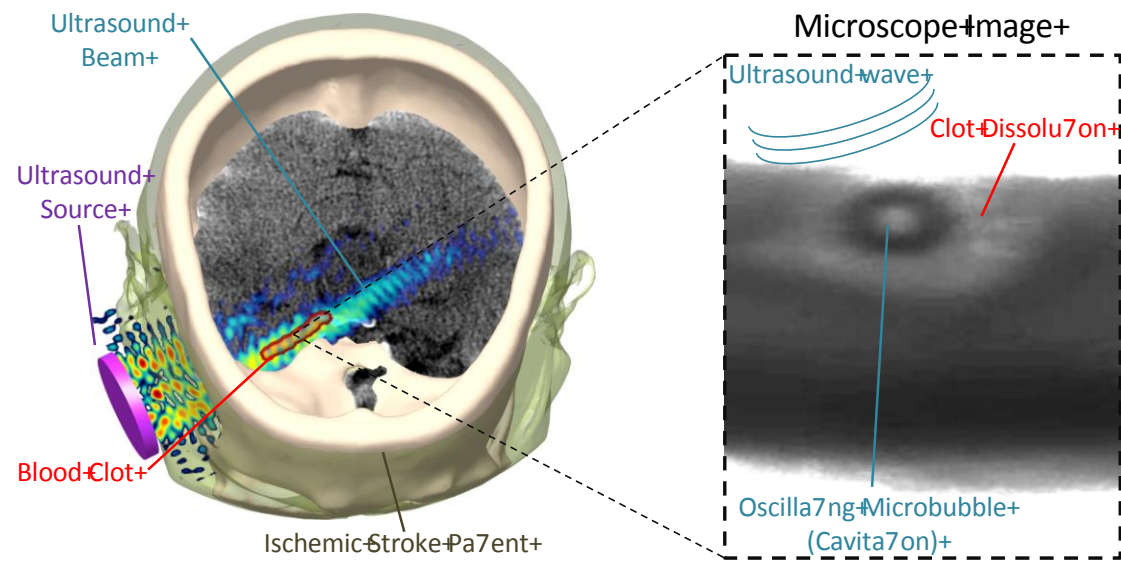


Ultrasound-assisted thrombolysis for stroke therapy

Ultrasound enhances drugs to dissolve clots and rapidly restore blood flow in the brain to treat ischemic stroke.

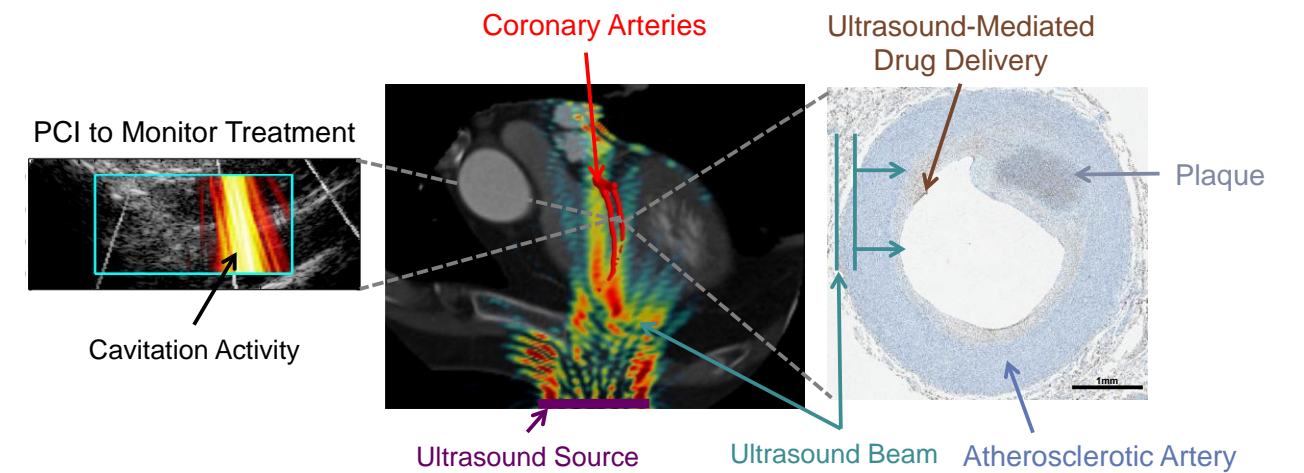
Funded by NIH: R01 NS047603 (Holland and McPherson)



Treatment of coronary heart disease

An image-guided ultrasound assembly is under development to deliver a drug, a gene, or a bioactive gas to the heart. Passive Cavitation Imaging (PCI) will be used to monitor the treatment progress. Clinicians will be able to characterize and treat coronary heart disease under ultrasound guidance.

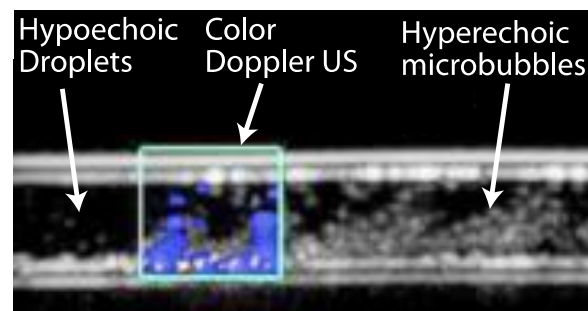
Funded by NIH: R01 HL074002 (Holland and McPherson)



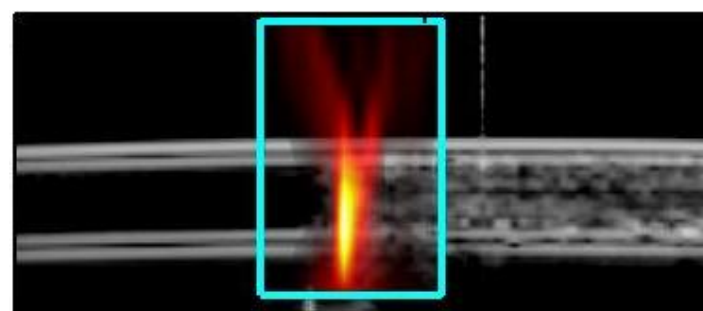
Vascular imaging and therapy using acoustic droplet vaporization

Acoustic droplet vaporization (ADV) creates in situ stable microbubbles for imaging and therapy. Microbubble production can be assessed using both B-mode imaging and cavitation emission. Funded by NIH: KL2 TR00078 (Haworth)

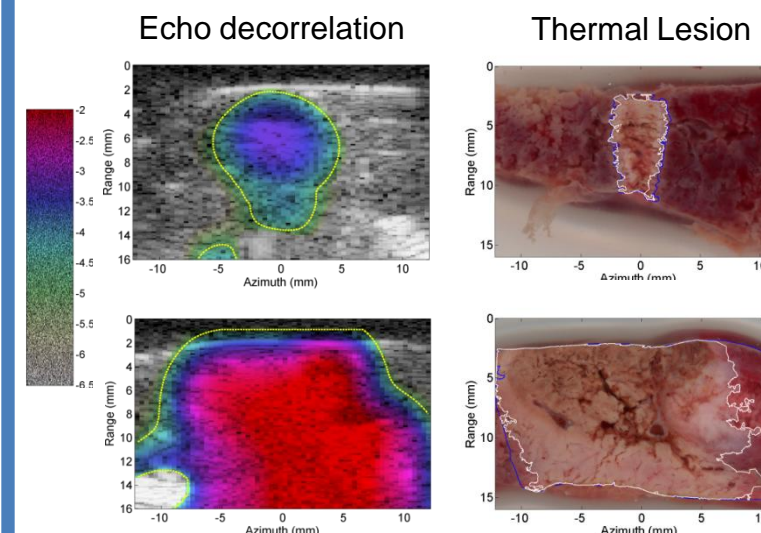
Doppler Ultrasound Initiated ADV



Duplex PCI and Bmode Imaging of ADV



Real-time prediction and control of thermal ablation



Echo decorrelation imaging is being developed for real-time guidance and control of radiofrequency ablation, high-intensity focused ultrasound, and other thermal cancer therapies. Funded by NIH: R01 CA158439 (Mast)



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