

University of Houston - Biomedical Engineering Seminar

Friday, April 2, 2021, 12 noon

Via Zoom: <https://uofh.zoom.us/j/92470065206>

Transcranial Magnetic Resonance Guided Focused Ultrasound



Kim Butts Pauly, Ph.D.

Abstract

Our research is in focused ultrasound and MR-guided focused ultrasound. Our goal is to improve these focused ultrasound therapies as they become more commonly used in the clinic. Most of our work is in brain applications of focused ultrasound and includes both basic science and engineering of the image guidance. Our brain work can be split into application areas: treatment of movement disorders in humans, blood-brain barrier opening in preclinical models, and neuromodulation in preclinical models and moving toward human application. We also have some ongoing work in improving MR thermometry in the treatment of body cancers in human

Biosketch

Kim Butts Pauly holds a BS in Physics from Duke University and a PhD in Biophysical Sciences from the Mayo Graduate School. She joined Stanford in 1996 and is currently Professor of Radiology with appointments in Electrical Engineering and Bioengineering, by courtesy. She is Director of the Radiological Sciences Laboratory at Stanford (rsl.stanford.edu). She is a Fellow of the International Society of Magnetic Resonance in Medicine (ISMRM) American Institute for Medical and Biological Engineering (AIMBE)'s College of Fellows and a Distinguished Investigator at The Academy of Radiology Research.