In Search of Targeted Cancer Treatment: Magnetic Fluid Hyperthermia and Ultrasound-Mediated Therapies

The “holy grail” of cancer treatment is a targeted procedure that can kill cancerous tumors without damaging surrounding healthy tissue. In this talk, I will discuss efforts to develop methods using magnetic and ultrasonic fields for therapeutic ends. I will also describe some of our efforts to implement magnetic fluid hyperthermia and ultrasound-mediated therapy and discuss opportunities and challenges for future work in this area.