

Imaging Science Seminar

Image-Guided Focused Ultrasound Therapy

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Abstract: Image-guided therapy (IGT), a central concept of 21st century medicine, is the use of medical imaging to plan, perform, and evaluate surgical procedures and therapeutic interventions. High-intensity focused ultrasound (HIFU) is a non-invasive therapeutic technology with the potential to transform the treatment of many medical disorders by using ultrasonic energy to target tissue deep in the body without incisions or radiation. Innovative therapeutic techniques have been developed using HIFU as a technology platform. This talk will address technology development and clinical translation of image-guided ultrasound therapy, including both imaging-guided ultrasound brain drug delivery and image-guided hyperthermia.

Time: 8:40-9:30 a.m.

Date: Friday, Nov. 3, 2017

Room: 0120 Green Hall

Prof. Hong Chen is an assistant professor, who joined Washington University in St. Louis in July 2015 with a joint appointment between the Department of Biomedical Engineering and the Department of Radiation Oncology. She earned her Ph.D. degree in Bioengineering from the University of Washington in 2011. After graduation, she worked as a senior fellow in the School of Medicine at the University of Washington. From 2012 to 2015, she was a postdoctoral research scientist in the Department of Biomedical Engineering at the Columbia University. The mission of Prof. Chen's lab is to translate basic research advances in ultrasound imaging and therapy into image-guided therapy devices that can impact cancer patient care. For more information about her lab, please visit <http://chenultrasoundlab.wustl.edu/>