DEPARTMENT OF BIOMEDICAL ENGINEERING SEMINAR SERIES
PRESENTS

Russel S. Witte, PhD
Professor of Medical Imaging, Optical Sciences, Biomedical Engineering, & Neurosurgery
University of Arizona
Founder/CEO, ElectroSonix LLC

“The Body Electric”

ABSTRACT:

Despite dramatic advances in medical imaging and therapy over the last 75 years, the U.S. population remains one of the sickest among first-world countries. Whereas the popular medical paradigm views the human body as a chemical-mechanical machine, all biological organisms are fundamentally electromagnetic systems. This presentation will explore the role of electromagnetic fields, frequency, and vibration in biology and medicine that goes well beyond the action potential. Inspired by Robert Becker MD’s book The Body Electric, we will journey into the past and revisit pioneers who discovered the ability of vibrational energies to impact cells, affect consciousness, regrow limbs and promote healing. From “the perils of electropollution to the promise of electromedicine,” are we ready for the next electromagnetic revolution?

BIO:

Russell S. Witte, PhD graduated with Honors in Physics from the University of Arizona (1993) and Bioengineering from Arizona State University (PhD, 2002), where he studied sensory coding and learning-induced plasticity in the mammalian brain using microelectrode arrays. Following a 5-year postdoc experience in the Biomedical Ultrasound Imaging Lab at the University of Michigan, he returned to his hometown Tucson, joining the faculty in the Dept. of Radiology at the University of Arizona in 2007. His current research team develops cutting-edge “hybrid” imaging modalities that integrate light, ultrasound, electricity, and microwaves to address grand challenges in biology, medicine and engineering. The ultimate goal is to improve patient care by providing tools that enhance diagnostic accuracy and treatment-decision making compared to current state-of-the art. Dr. Witte is a member of prestigious scientific organizations, such as IEEE, SPIE, BMES, has over 200 publications, 10 patents, and is Founder/CEO of ElectroSonix LLC, a local spinoff company commercializing acoustoelectric imaging technology for cardiac applications.

Please join us on

Monday, January 25th, 2021
12:00-12:50 pm, https://arizona.zoom.us/j/85468611706

Hosts: Dr. DK Kang and Dr. Russ Witte
dkkang@arizona.edu and r witte@arizona.edu

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