

## **SPIE Medical Imaging 2019**

*Current Trends in Pre-Clinical Photoacoustic Imaging of Small Animals Workshop*

Hosted by PhotoSound Technologies, Inc.

Tuesday, February 19<sup>th</sup>, 2019

Photoacoustic tomography is an emerging biomedical imaging modality combining molecular sensitivity of optical imaging with the resolution of ultrasound. The purpose of this workshop is to present emerging photoacoustic technologies and related scientific equipment/instrumentation being used to further the advancement of pre-clinical small animal imaging.

### **8:30 am to 9:05 am**

*"Photoacoustic Tomography: Deep Tissue Imaging by Ultrasonically Beating Optical Diffusion"*

Prof. Lihong Wang, California Institute of Technology

### **9:05 am to 9:40 am**

*"Photoacoustic Fluorescence Tomography (PAFT) for Small Animal Preclinical Imaging"*

Sergey Ermilov, PhD, PhotoSound Technologies, Inc.

### **9:40 am to 10:10 am**

Coffee Break (provided inside meeting room)

### **10:10 am to 10:35 am**

*"Modern image reconstruction approaches for 3D photoacoustic computed tomography."*

Prof. Mark Anastasio, Washington University in St. Louis

### **10:35 am to 11:00 am**

*"Spectral photoacoustic imaging of placental function"*

Prof. Carolyn Bayer, Tulane University

### **11:00 am to 11:25 am**

*"Applications of Photoacoustic Imaging in Enhanced Fetal and Maternal Care"*

Prof. Mohammad Mehrmohammadi, Wayne State University

### **11:25 am to 11:50 am**

*"Preclinical development of quantitative photoacoustic imaging for improved cancer diagnostics and therapy monitoring"*

Prof. Richard Bouchard, MD Anderson Cancer Center

### **11:50 am to 12:10 pm**

*"Choosing the Right Laser Technology for Photoacoustic Imaging"*

Mark Little, PhD, PhotoSound Technologies, Inc.