



THE UNIVERSITY OF ARIZONA
COLLEGE OF ENGINEERING

Biomedical Engineering

DEPARTMENT OF BIOMEDICAL ENGINEERING SEMINAR SERIES

PRESENTS

Lihong Wang

Ph.D., Bren Professor

Andrew and Peggy Cherng Department of Medical Engineering, Department of Electrical Engineering, California Institute of Technology <http://COILab.caltech.edu/>

“World’s Deepest-Penetration and Fastest Optical Cameras: Photoacoustic Tomography and Compressed Ultrafast Photography”

ABSTRACT: We developed photoacoustic tomography to peer deep into biological tissue. Photoacoustic tomography (PAT) provides in vivo omniscale functional, metabolic, molecular, and histologic imaging across the scales of organelles through organisms. We also developed compressed ultrafast photography (CUP) to record 10 trillion frames per second in real time, orders of magnitude faster than commercially available camera technologies. CUP can capture the fastest phenomenon in the universe, namely, light propagation, at light speed and can be slowed down for slower phenomena such as combustion.

BIO: Lihong Wang is Bren Professor of Medical and Electrical Engineering at Caltech. Published 525 journal articles (h-index = 132, citations = 72,000). Delivered 530 keynote/plenary/invited talks. Published the first functional photoacoustic CT, 3D photoacoustic microscopy, and compressed ultrafast photography (world’s fastest camera). Served as Editor-in-Chief of the Journal of Biomedical Optics. Received the Goodman Book Award, NIH Director’s Pioneer Award, OSA Mees Medal, IEEE Technical Achievement and Biomedical Engineering Awards, SPIE Chance Biomedical Optics Award, IPPA Senior Prize, OSA Feld Biophotonics Award, and an honorary doctorate from Lund University, Sweden. Inducted into the National Academy of Engineering.

Please join us on

Monday, December 2nd, 2019

12:00-12:50 pm, Keating Bldg., Room 103

Refreshments will be available at 11:50 am

Host: Judith Su, Ph.D.

judith@email.arizona.edu

Persons with a disability may request a reasonable accommodation by contacting the Disability Resource Center at 621-3268 (V/TTY).

