UNIVERSITY of HOUSTON ENGINEERING

Department of Biomedical Engineering

Seminar Structural and Functional Imaging of Tissues with Optical Coherence Tomography

Friday, September 2, 2016 SEC 204: 12-1PM

Speaker: Dr. Kirill Larin



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Abstract: Development of novel methods for structural and functional imaging, monitoring and quantification of different biological processes in tissues and small organs has gained tremendous interest in view of the varied applications of Biomedical Optics. This talk will overview several research projects at the Biomedical Optics Lab on development and applications of Optical Coherence Tomography technique for structural and functional imaging of different tissues, including noninvasive monitoring of molecular diffusion and optical clearing, assessing embryonic development, and quantifying biomechanical properties of different tissues.

Bio: Kirill V. Larin is Professor of Biomedical Engineering at the University of Houston. He also holds joint appointments at the Department of Physiology and Biophysics at Baylor College of Medicine and Department of Optics and Biophysics at the Saratov State University (SSU) in Russia. Larin

received his first M.S. in Laser Physics and Mathematics from the SSU (1995), his second M.S. in Cellular Physiology and Molecular Biophysics (2001) and Ph.D. in Biomedical Engineering (2002) from the University of Texas Medical Branch in Galveston. His research contributions are in Biomedical Optics and Biophotonics and development and application of various optical methods for noninvasive and nondestructive imaging and diagnostics of tissues and cells. Larin has authored more than 100 peer-reviewed publications and chapters in six textbooks on Biomedical Optics. He is the recipient of Presidential Award from Russian President Boris Yeltsin. He has also received Wallace Coulter Young Investigator Translation Award, Office of Naval Research Young Investigator Award, Outstanding Young Investigator Award from the Houston Society for Engineers in Medicine and Biology, and Herbert Allen Award from American Society for Mechanical Engineers. Larin currently serves as an Instructor for short courses on Tissue Optics. He is also Fellow of SPIE and OSA.