Biomedical Image Computing and Informatics Seminar

"Cancer Imaging: Challenges and Opportunities at the National Cancer Institute"

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Smilow Rubenstein Auditorium & Commons
3400 Civic Center Blvd., 1st floor
Thursday, October 18, 2018 at 1pm
Pizza lunch at 12:45pm

Abstract

This presentation introduces the Cancer Imaging Program of the National Cancer Institute (NCI), with emphasis on recent developments in cancer imaging informatics and image-guided intervention technologies. We will survey the development, current, and future directions of the NCI Quantitative Imaging Network (QIN), the Cancer Imaging Archive (TCIA), and challenges for benchmarking of algorithms in imaging data science as building blocks of AI. A brief discussion of research funding opportunities related to the above areas will also be presented.

Bio

Dr. Keyvan Farahani is the Program Director for Image-Guided Interventions (IGI), in the Cancer Imaging Program at the National Cancer Institute. In this capacity he is responsible for development of NCI research initiatives that support innovations in minimally-invasive diagnosis and treatment of cancer through integration of advanced imaging and interventional technologies, including image-guided surgery, focused ultrasound, robotics, and nanotechnology. He is also the Deputy Director for Technology in the NCI Quantitative Imaging Network, where he oversees development of collaborative platforms, conduct of challenges and collaborative projects and benchmarking of QI tools and methods. He has led NCI research initiatives in oncologic IGI focused on small business development, early phase clinical trials, and image-guided drug delivery. Since 2013, in collaboration with national and international academic groups, Dr. Farahani has led the development of many challenge competitions in imaging, digital pathology, and radiomics of cancer, conducted through international scientific societies. He is an active member of the American Association of Physicists in Medicine (AAPM) and the Society for Imaging Informatics in Medicine (SIIM). Dr. Farahani obtained his PhD in Biomedical Physics from the University of California at Los Angeles in 1993. Since 2016 he is a fellow of the American Institute for Medical and Biological Engineering (AIMBE).