



## **Biomedical Image Computing and Informatics Seminar**

### **“Imaging Informatics Innovations to Improve Patient Care”**

#### **Tessa Cook, MD, PhD**

Assistant Professor  
Department of Radiology  
University of Pennsylvania

#### **Biomedical Research Bldg (BRB), Gaulton Auditorium & Lobby**

421 Curie Blvd., 1st floor

**Thursday, January 31, 2019 at 1pm**

***\*\*Pizza lunch at 12:45pm\*\****

#### ***Abstract***

Patients face a number of challenges as they navigate their care in radiology. Clinical imaging informatics can be combined with patient-centered principles to improve clinical care. In particular, some innovations exist that can address IT challenges that patients encounter in radiology. In this presentation, Dr. Cook will discuss three innovations: 1) monitoring follow-up of patients with findings of possible cancer in the abdomen and pelvis, 2) annotating radiology reports with patient-friendly language, and 3) connecting patients directly to radiologists.

#### ***Bio***

Dr. Cook is an Assistant Professor of Radiology at the Perelman School of Medicine at the University of Pennsylvania in Philadelphia. She has a strong background in imaging informatics, having done her doctoral work in quantitative image processing in the Penn Image Computing and Science Laboratory (PICSL) of Dr. James Gee. During her residency, Dr. Cook became heavily involved in clinical imaging informatics research and completed a dedicated year of research as part of her residency. She is the developer of RADIANCE, an open-source software pipeline for radiation exposure monitoring for computed tomography. Dr. Cook is an active member of multiple radiology societies, including the RSNA, ACR, SIIM, AUR and SCMR. She was one of the two recipients of the 2011 E. Stephen Amis, Jr. Fellowship in Quality and Safety offered annually by the American College of Radiology. In 2013 she was named one of the four AUR GERRAF fellows for 2013-2015. Dr. Cook currently enjoys an academic appointment in radiology that enables her to continue her clinical work and research in imaging informatics. She is the director of the Imaging Informatics Fellowship in the Department of Radiology, as well as the clinical director of the department's 3-D and Advanced Imaging Laboratory. She is also the Co-Director of the Center for Practice Transformation. In these roles, she is pursuing innovative methods to augment radiologists' workflow and improve the delivery of longitudinal patient care in radiology. Dr. Cook's current research sits squarely at the intersection of imaging informatics and health services. She and her team were awarded one of the first grants from the Penn Center for Healthcare Innovation, in order to develop and study an automated radiology recommendation-tracking engine. She is currently participating in one of their Innovation Accelerator programs to develop methods to decrease the number of patients diagnosed with late-stage hepatocellular carcinoma.