Thursday, February 26th, 2021 at 12 noon

Carri Glide-Hurst PhD, DABR, FAAPM

Associate Professor, Department of Human Oncology and serves as the Director of Radiation Oncology Physics at the University of Wisconsin as of July 1st.

Title: Toward High Precision MR-guided Radiation Therapy

Abstract:
The advent of MR-simulation in the treatment position and MRI-guided radiation therapy has put MRI’s powerful soft tissue contrast into daily cancer radiation therapy practice. This talk will focus on the fundamentals of these new modalities, describe challenges (and potential solutions) of performing MRI in the treatment position, and provide an overview of their role in adaptive radiation therapy. Novel applications including functional MRI and cardiac approaches will be shared.

-Over the last decade, Dr. Glide-Hurst’s primary areas of research and clinical expertise include magnetic resonance simulation (MR-SIM), MR-only radiation therapy including deep learning for image segmentation and translation (the topic of her current NIH R01), MR-guided radiation therapy, and adaptive radiation therapy. Her most recent research interests are in cardiotoxicity and longitudinal functional MRI.

-She has spearheaded efforts for establishing national and international guidelines for safe integration into clinical practice including chairing AAPM Task Group 284 on the implementation of MR-SIM in Radiation Oncology and TG-352 on MR-linacs. She serves as the Scientific Program director for the annual AAPM meeting and holds leadership roles across many international organizations including ASTRO, AAPM, and ICRU.

-As a board-certified medical physicist with over 13 years of clinical experience, Dr. Glide-Hurst is known for multi-disciplinary collaborations and building bridges between clinical, academic, and industry partners. Above all else, Dr. Glide-Hurst is most passionate about mentoring trainees as they begin their medical physics careers.