

# SEAPM THE SOUTHEAST CHAPTER OF THE AMERICAN ASSOCIATION OF PHYSIC AMERICAN ASSOCIATION OF PHYSICISTS IN MEDICINE

## 2021 SEAAPM Virtual Scientific Meeting January 29 - 30, 2021

## From Smart Tools to Smart Practice: Science, Collaboration, **Efficiency and Quality**

Program Director: Carnell Hampton, PhD, SEAAPM President-elect

### **Schedule**

	Thursday, January 28 <sup>th</sup> (Joint Session with Symposium)			
6:00-7:30 PM	Interview Skills for the Early Career Medical Physicist Robert A. Rodgers, MS, Vanderbilt University, Nashville, TN Joshua M. Wilson, PhD, Duke University, Durham, NC			
Friday, January 29th				
12:10-1:00 PM	Lunch Break Visit the Exhibitors			
1:00-1:20 PM	Welcome and Introduction Carnell J Hampton, Levine Cancer Institute/Atrium Health, Charlotte, NC			
1:20-1:35 PM	MedPhys Slam Introduction  Carnell J Hampton, Levine Cancer Institute/Atrium Health, Charlotte, NC  Smart Practice - Can we reduce replan rates in head and neck proton therapy based on clinical and dosimetric data  Duncan Bohannon, Georgia Tech University, Atlanta, GA  Artificial Intelligence Powered Prediction for Online Adaptive Patient Specific QA  Lam Lay, Duke University, Durham, NC  Blood flow in chronic stroke lesions: an improved model of brain-behavior relationships  Clara Glassman, Georgia Tech University, Atlanta, GA  The Effects of Daily Treatment Uncertainty on TCP/NTCP in Dominant Intraprostatic Lesion Simultaneous Integrated Boost Using Intensity Modulated Proton Therapy  John Demoor, Georgia Tech University, Atlanta, GA  Physics Experiences with Implementing a New Treatment for Brain Tumors Sherry Koufigar, Piedmont Cancer Center, Atlanta, GA			

	MedPhys Slam Q&A	
1:35-1:50 PM	MedPhys Slam Winner Presentation	
	Gold Sponsor Presentation	
1:50-2:00 PM		
	General Session I  Predicting SSDE from CT localizer images following AAPM task group reports 204	
	and 220	
	Christiane Burton, St Jude Children's Research Hospital, Memphis, TN	
	Multi-Clinic Standardization of QA: From Excel to the Cloud	
	Mark DiMascio, Atrium Health, Charlotte, NC	
2:00-2:50 PM	Synthesize 3D realistic CT textures and anatomy in the XCAT phantom using Generative Adversarial Network (GAN)	
	Yijie Yuan, Duke University, Durham, NC	
	Interactive Clinical Assignment Tool (iCAT): A Web-Based Multi-Facility Scheduling Program	
	Robert Rogers, Vanderbilt University School of Medicine, Nashville, TN	
	A Physics-Led All Inclusive Continuous Quality Improvement Forum	
	Ryan Foster, Atrium Health, Charlotte, NC	
2:50-3:00 PM	General Session I Q&A	
3:00-3:45 PM	Afternoon Break – Sponsored by Akesis	
3.00-3. <del>4</del> 3 1 W	Visit the Exhibitors	
	General Session II	
	Eclipse Scripting, Clinical Protocols and Clinical Goals: Tools that can help with Efficiency	
	Lara Dyke and Adam Schoen, Varian Medical Systems	
3:45-4:15 PM	Quality Process Improvement Through the Standardization of Aria Encounters and the Use of Automation Within a Multi-Site Institution	
	David Piantino, Atrium Health, Charlotte, NC	
	A Multi-Institutional Failure Modes and Effects Analysis (FMEA) to Assess the Risks of Pandemic-Associated Workflow Adaptations	
	Stephanie Parker, Wake Forest Baptist Health High Point Medical Center, High Point, NC	
4:15-4:25 PM	General Session II Q&A	
4:25-5:00 PM	Keynote Presentation and Q&A	
	Medical Physics 3.0	
	Ehsan Samei, PhD, Duke University, Durham, NC	
5:30-8:00 PM	Trainee ePoster Session and SEAAPM Social Event – Sponsored by QFix	
	Saturday, January 30th	
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8:00-8:10 AM	Welcome and Introduction
	Carnell J Hampton, Levine Cancer Institute/Atrium Health, Charlotte, NC
8:10-8:50 AM	Trainee Presentations I
	Quantitative Comparison of CyberKnife Delivery Modalities: MLC Based Plans vs Iris Based Plans
	Mary Oakey, University of North Carolina, Chapel Hill, NC
	Design and implementation of a novel 3D-printed phantom for surface guided radiation therapy quality assurance
	Kiran Pant, University of North Carolina, Chapel Hill, NC
	Utilization of an In-House Phantom for End-To-End Verification of a CBCT-Based Online Adaptive Radiotherapy System
	Abigail Dare, Vanderbilt University School of Medicine, Nashville, TN
	Method for Online IGRT-based Proton Dose Prediction
	William Lepain, Georgia Tech University, Atlanta, GA
	Feasibility of Hippocampal Avoidance and Effects of MLC Leaf Width in SIMT SRS
	Zachary Gude, Duke University, Durham, NC
8:50-9:00 AM	Trainee Presentations I Q&A
	Gold Sponsor Presentation

9:00 - 9:05 AM



9:05-9:37 AM	An algorithmic approach to 3-D breast auto-planning Gregory Szalkowski, University of North Carolina, Chapel Hill, NC NeSTerS: A Record and Verify System Smart Tool Supplement for Tracking Patient Treatment Plan Status Milad Baradaran, Vanderbilt University School of Medicine, Nashville, TN Physics Competency Program: A Solution for Completing the Demonstration and Verification Components During COVID-19 Pandemic Restrictions Abigail Dare, Vanderbilt University School of Medicine, Nashville, TN Automated Linac QA using Scripting in conjunction with Varian Developer Mode
	Keith Pearman, Cone Health, Greensboro, NC
9:37-9:45 AM	Trainee Presentations II Q&A
9:45-9:50 AM	Gold Sponsor Presentation  SOFTWARE
9:50-10:35 AM	Morning Break – Sponsored by MIM  Visit the Exhibitors

	State of the AAPM
10:35-11:45 AM	Session/Speaker Introduction
	Carnell J Hampton, Levine Cancer Institute/Atrium Health, Charlotte, NC
	Recent developments and trends in diagnostic x-ray imaging and AAPM's role in advancing medicine of the future  James Dobbins III, PhD, FAAPM, AAPM President
	Chapter Session
11:45 AM-12:15 PM	Chapter Awards
	Michelle Wells, MS, Piedmont Health, Atlanta, GA
	Closing Remarks
	Carnell J Hampton, Levine Cancer Institute/Atrium Health, Charlotte, NC
	The Chapter Business Meeting will directly follow the Scientific Meeting.

#### The Southeast Chapter of AAPM would like to acknowledge the support of our Gold sponsors















This meeting has applied to CAMPEP for approval of 5.75 MPCEC hours.

All times are given in Eastern Standard Time (EST).