

# SEAAPM 50th Scientific Meeting

## Continuous Improvement: Clinical Experience with Increasing Safety, Quality, and Efficiency

January 31-February 1, 2020

Hilton Garden Inn Downtown Nashville, Tennessee

Program Director: Stephanie Parker, M.S., DABR, SEAAPM President-elect

**Friday, January 31, 2020**

**12:00 – 1:00pm**

**Complimentary Lunch**

1:00 – 1:10pm	Welcome and Introduction <i>Stephanie Parker, M.S., Wake Forest Baptist Health, High Point, NC</i>
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### MedPhys Slam Competition

1:10– 1:16pm	Quantitation of R2* Relaxation Times for Variable Phantom Positioning <i>Andrew Headley, M.S., Vanderbilt University Medical Center, Nashville, TN</i>
1:16– 1:22pm	Image Based Dosimetry Following Transarterial Radioembolization <i>Briana Thompson, Wake Forest School of Medicine, Winston-Salem, NC</i>
1:22– 1:28pm	Comparing filter kernels on GE and Philips CT scanners using noise power spectrum <i>Eric McKenzie, M.S., University of Alabama at Birmingham, AL</i>
1:28 – 1:34 pm	An efficient optimization method for prostate LDR planning by including prior knowledge <i>Gregory Szalkowski, Ph.D., UNC Health Care, Chapel Hill, NC</i>
1:34 – 1:40pm	Evaluation of the RayStation Monte Carlo dose algorithm for small-field surface-collimated electrons <i>Jeff Fenoli, M.S., UNC Health Care, Chapel Hill, NC</i>
1:40 – 1:46pm	Converting from Measurement Based Patient QA to Log File Patient QA in Spot Scanning Proton Therapy <i>Laura Cutler, M.S., Provision Proton Therapy Center, Nashville, TN</i>
1:46– 1:52pm	Evaluation of Inverse Planning and Dynamic Shaping Software for Gamma Knife Treatment Planning <i>Matthew Andriotti, Georgia Institute of Technology, Atlanta, GA</i>
1:52 – 1:58pm	Applying Service Graphing to Test Beam Symmetry vs Gantry Angle <i>Ryan Pappafotis, M.S., University of North Carolina, Chapel Hill, NC</i>
1:58 – 2:04pm	Learning-Based Dual Energy CT from Single Energy CT for Proton Radiation Therapy <i>Serdar Charyyev, Ph.D., Emory University, Atlanta, GA</i>
2:04 – 2:10pm	Robustness of AirNET to training library for sparse-view CT <i>Zachary M. Diamond, Georgia Institute of Technology, Atlanta, GA</i>

## Imaging Applications in Radiation Therapy Continuous Improvement

2:15 – 2:30pm	Innovative Image-guided Treatment Strategies for Continuous Improvement in Radiation Oncology <i>Indrin Chetty, Ph.D., Henry Ford Cancer Institute, Detroit, MI</i>
2:30 – 2:45pm	Quality Assurance of geometrically corrected MR images for intracranial brain tumor radiotherapy <i>Ali Fatemi, Ph.D., University of Mississippi Medical Center, Jackson, MS</i>
2:45 – 3:00 pm	An overview of TG-180: Image guidance doses delivered during radiotherapy: Quantification, management, and reduction <i>George Ding, Ph.D., Vanderbilt University Medical Center, Nashville, TN</i>

**3:00– 3:45pm**

**Afternoon Break & Refreshments**

## Safety

3:45 – 4:00pm	Implementation and Development of Safety Checklist and Good Catch Applications <i>Alan Baydush, Ph.D., Wake Forest School of Medicine, Winston-Salem, NC</i>
4:00 – 4:15pm	Updating a protocol for managing cardiac implanted electronic devices (CIEDs) across a multi-facility network <i>Carnell Hampton, Ph.D., Atrium Health, Charlotte, NC</i>
4:15 – 4:30pm	CT Protocol Management at UAB - the TG309 way <i>David M. Gauntt, Ph.D., The University of Alabama at Birmingham, AL</i>
4:30 – 4:45pm	Patient and staff radiation doses evaluation during endovascular surgery procedures <i>Hamid Khosravi, Ph.D., University of Mississippi Medical Center, Jackson, MS</i>
4:45 – 5:00pm	Override reduction at first treatment <i>James Ververs, Ph.D., Wake Forest School of Medicine, Winston-Salem, NC</i>
5:00 – 5:15pm	Utilizing FMEA for Surface-Guided DIBH Treatments <i>Megan Bright, M.S., Atrium Health, Concord, NC</i>
5:15 – 5:30pm	Managing patients with implanted cardiac devices: A review of the recommendations of AAPM TG-203 <i>Richard Popple, Ph.D., The University of Alabama at Birmingham, AL</i>

**6:00 – 8:00 pm**

**SEAAPM Night In + SEAAPM Trainee Poster Session**

**(All trainees with oral presentations participate in the poster session)**

<b>Additional Poster Presentation</b>	Improvement of SRS patient QA via 3D dose reconstruction from multiple 2D planar measurements <i>Oluwadamilola Fasina, Duke University, Durham, NC</i>
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**Saturday, February 1, 2020**

**7:00 – 8:00am**

**Complimentary Breakfast**

### Quality and Efficiency

8:00 – 8:15am	Proposed Hydrogel-Implant-Quality-Score (HIQS) and a Matched-Pair Study for Prostate Radiotherapy <i>Han Liu, Ph.D., Cone Health, Greensboro, NC</i>
8:15 – 8:30am	Automatic Optimization in Eclipse Utilizing RapidPlan and Multicriteria Optimization <i>Jonathan Rogers, M.S., Atrium Health, Charlotte, NC</i>
8:30 – 8:45am	Development and Implementation of an In-House System for Testing Radiation Vs. Mechanical Isocenter Coincidence <i>Lauren Rigsby, D.M.P., Provision Proton Therapy Center, Knoxville, TN</i>
8:45 – 9:00am	How accurate do prostate contours have to be? <i>David Wiant, Ph.D., Cone Health, Greensboro, NC</i>
9:00 – 9:15am	How to make chart checks helpful again and awesome! <i>Benjamin Sintay, Ph.D., DABR, Cone Health, Greensboro, NC</i>

### Keynote

9: 15– 9:45 am	Our First 50 Years, Advancing the Practice of Medical Physics in the Southeast and Beyond <i>Perry Sprawls, Ph.D., Emory University, Atlanta, GA</i>
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**9:45 – 10:30am**

**Morning Break & Refreshments**

### Snap Oral Trainee Session

10:30 – 10:38am	Development and Evaluation of a DIR Hybrid Method Using B-Spline and Deep Learning <i>Ala Amini, M.S., Duke University, Durham, NC</i>
10:38 – 10:46am	An Experience in Risk Analysis of Beam Data Collection for Small Fields <i>Jonathan Hill, M.S., Erlanger Health System, Chattanooga, TN</i>
10:46 – 10:54 am	A Model Using Trajectory Log Files to Predict MLC Positioning Accuracy for Patient Specific IMRT and VMAT Plans <i>Kai-Cheng Chuang, B.S., Duke University, Durham, NC</i>
10:54 – 11:02 am	Increasing Efficiency of Patient-Specific Quality Assurance in a Pencil Beam Scanning (PBS) Proton Therapy Center <i>Michael Leyva, M.S., Provision CARES Proton Therapy Center, Knoxville, TN</i>
11:02 – 11:10 am	Anti-Scatter Grid Performance in 2D Breast X-Ray Imaging <i>Robert Boggs, Ph.D., The University of Alabama at Birmingham, AB</i>
11:10 – 11:18 am	Improving Efficiency for Proton Pencil Beam Scanning Head and Neck Treatment Planning Using Automation <i>Scott Petro, M.M.P., Provision CARES Proton Therapy Center, Knoxville, TN</i>

11:18 – 11:26 am	Electronic Portal Imaging For Shoot-through Proton FLASH Radiation Therapy: A Proof of Concept <i>Serhar Charyyev, Ph.D., Emory University, Atlanta, GA</i>
11:26 – 11:34 am	Quality assurance for an automated VMAT SRS system <i>Yuan Yuan, Ph.D., The University of Alabama at Birmingham, AB</i>

### Ethics

11:35am– 12:00pm	Revisions to the AAPM Code of Ethics <i>Sunshine Osterman, Ph.D., Assistant Professor, NYU Langone health</i>
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### Chapter Session

12:00 – 12:25 pm	Presentation of Chapter Awards <i>Benjamin Sintay, Ph.D., DABR, Cone Health, Greensboro, NC</i>
12:25 – 12:30pm	Closing Remarks <i>Stephanie Parker, M.S., Wake Forest Baptist Health, High Point, NC</i>

**12:30 pm**

**Box Lunches available – Please grab one as you join us at the business meeting and/or travel home**

*This meeting has applied to CAMPEP for approval of 7.25 MPCEC hours.*

*The Chapter Business Meeting will directly follow the Scientific Meeting.*

***The Southeastern Chapter would like to acknowledge  
the support of our Gold sponsor:***

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