2015 SEAAPM SYMPOSIUM PROGRAM

April 23-24, 2015

Embassy Suites Raleigh-Durham/Research Triangle in Cary, North Carolina

Program Director: Ingrid Marshall, PhD, Medical University of South Carolina - Charleston, SC

Abstract: ***Today's radiation therapy field is much more complex and very different than in the past and so, unsurprisingly, is the demand on today's clinical physicist. Ever-increasing needs for quality, efficiency and safety paired with ever-changing technology can be overwhelming for today's clinically-based physicist. Therefore the goal of year's symposium is to bring every physicist at clinics of any size up to speed on the current technology and how it affects what we think we know about acceptance testing, commissioning, patient treatments, and routine quality assurance.***

- ***As treatment margins are shrinking and doses are escalating, the accuracy of patient positioning is now very dependent on the physicist to ensure the accuracy and quality of the pre-treatment imaging.***
- ***Implementation of TG-142 and the use of commercially-available technology to facilitate the quality assurance process is more important than ever.***
- ***SRS and SBRT is not only being performed in academic settings anymore and therefore the accuracy of small field dosimetry and patient positioning at every clinic is essential.***
- ***Treatment planning needs have become very complex and therefore thorough treatment planning commissioning and routine quality assurance is essential to ensure correct treatments. The ability and importance of using patient- and site-specific objectives in treatment planning will be also demonstrated.***
- ***The popularity and usage of deformable registration has increased rapidly, but appropriate implementation and commissioning is crucial.***

Many of this year's speakers serve as members and chairs of several current AAPM Task Group committees and therefore truly understand the topics they are presenting. These speakers are also intimately aware of the problems faced by today's clinical physicist and will point out possible pitfalls as well as provide the audience with the tools they need to succeed in today's ever-changing clinics.

Target Audience: ***Practicing Diagnostic, Nuclear Medicine, and Radiation Therapy Medical Physicists***

CAMPEP credits: ***8.5 MPCEP hours pending***

Schedule of Events

Wednesday, April 22	
6:00-8:00 PM	Registration & Ice Breaker
Thursday, April 23	
7:15-8:00 AM	Breakfast
8:00-8:15 AM	Welcome and Overview *Ingrid Marshall, PhD, Medical University of South Carolina - Charleston, SC*
8:15-9:00 AM	Acceptance testing and routine QA on Elekta Linac (Versa HD) *Jared Weatherford, MS, Kettering Medical Center – Kettering, OH*
9:00-9:45 AM	Acceptance testing, commissioning and routine QA of the Varian TrueBeam *Richard Popple, PhD, University of Alabama – Birmingham, AL*
9:45-10:00 AM	Questions and Discussion
10:00-10:30 AM	Morning Break

	Thursday, April 23, continued
10:30 AM- 12:00 PM	TPS Dose Algorithm commissioning and annual QA (TG244/MGGG #5) – Validation Experience with Pinnacle and Eclipse Planning Systems Overview of Guidelines, Point dose tests, IMRT/VMAT, heterogeneity tests *Jennifer Smilowitz, PhD, University of Wisconsin – Madison, WI* Evaluating Eclipse for a Varian TrueBeam using MPPG #5 *Dustin Jacqmin, PhD, Medical University of South Carolina - Charleston, SC*
12:00-1:00 PM	Lunch
1:00-1:45 PM	Mining data to develop planning and treatment quality metrics *Charles Mayo, PhD, Mayo Clinic – Rochester, MN*
1:45-2:30 PM	Clinical Implementation and Commissioning of Deformable Registration for Treatment Planning *Kristy Brock, PhD, University of Michigan – Ann Arbor, MI*
2:45-3:15 PM	Afternoon Break
3:15-4:00 PM	QA for In Room Imaging: the interface of hardware, software, and patients *Kristy Brock, PhD, University of Michigan – Ann Arbor, MI*
4:00-4:45 PM	Tools and Techniques for Efficiently Implementing the Recommendations of TG142 *Tim Ritter, PhD, University of Michigan – Ann Arbor, MI*
4:45-5:00 PM	Questions and Discussion
Friday, April 24	
7:15-8:00 AM	Breakfast
8:00-8:15 AM	Welcome and Overview *Ingrid Marshall, PhD, Medical University of South Carolina - Charleston, SC*
8:15-9:00 AM	Small Field Dosimetry *Indra Das, PhD, Indiana University – Indianapolis, IN*
9:00-9:45 AM	Clinical considerations for MLC based Linac SRS of small targets *Richard Popple, PhD, University of Alabama – Birmingham, AL*
9:45-10:00 AM	Questions and Discussion
10:00-10:30 AM	Morning Break
10:30-11:00 AM	SRS and SBRT QA *Indra Das, PhD, Indiana University – Indianapolis, IN*
11:00-11:30 AM	Sub-mm accuracy of accelerators: How manufacturers achieve it, how physicists verify it *Ivan Brezovich, PhD, University of Alabama – Birmingham, AL*
11:45-12:00 PM	Discussion and Adjournment