DELAWARE VALLEY SOCIETY FOR RADIATION SAFETY

*A Chapter of the Health Physics Society*

# THE 10th ANNUAL ROBERT FORREST MEMORIAL MEDICAL HEALTH PHYSICS FULL DAY SYMPOSIUM

**Friday, June 2nd, 2023**

8:30am – 5:30pm

Eligible for 6 CEUs for the ABHP

Continental Breakfast, Boxed Lunch and afternoon refreshments will be provided.

**Location:** LRSM – Room 105
3231 Walnut Street
Philadelphia PA, 19104

**Topics:**

**Challenges and Lessons Learned in Launching Pluvicto**
- Catherine M. Anderko, MS, DABR, CHP (Thomas Jefferson University and Hospital)

**USP 825 Nuts and Bolts for Rad Safety Officers**
- Michele Panichi-Egberts, RSO, FSNMMI-TS (NDP)

**Debunking Myths and Urban Legends in Ionizing Radiation Dosimetry RSO**
- Chris Passmore, CHP (Radiation Detection Company)

**Update to Emerging Technologies Using Unsealed Radioactivity in Veterinary Medicine…and Humans**
- Chad Smith, PhD, CHP, DABR (FX Masse Associates Inc)

**Managing Dosimetry in a Large Health Care Setting**
- Mark Pflug, MS, RPPT, CHMM, CLSO, CMLSO (Cone Health)

**Occupational Dose Reductions During FDG Administrations at a Large Cancer Care Center**
- Brian Quinn, MS (Memorial Sloan Kettering Cancer Center)

**Dose Estimates to Personnel from the Radioactive Materials Portion of Y-90 only During these Treatments**
- Andy Miller, MS, CHP, FHPS (Cleveland Clinic)

**Program:**

08:30am – 09:00am Registration and Continental Breakfast
09:00am – 09:15am Welcome and Opening Remarks
09:15am – 10:00am **Challenges and Lessons Learned in Launching Pluvicto**
Catherine M. Anderko, MS, DABR, CHP

Abstract: Lutetium-177 Vipivotide Tetraxetan (Pluvicto) was FDA-approved for the treatment of certain prostate metastases on 3/23/22. With a backlog of patients known to be eligible for this therapy, our center mobilized a team to begin a fast-track journey to make this radioligand therapy available to referring physicians. The complexities of the process were quickly realized, including the need for a multidisciplinary team, identification of treatment space, challenging workflow and logistics, technical obstacles, aggressive timelines, and increased capacity demands for staff. The planning team worked diligently to overcome the challenges and establish a pathway for the first patient treatment to occur within 5 months. Continual program adjustments were made when inefficiencies in workflow were identified. Our center has since performed over 70 successful Pluvicto treatments within a five-month period with no significant radiation or patient safety issues. This presentation will review the strategies used to fast track Pluvicto implementation and identify the elements for expansion into a Theranostics Center of Excellence.

*Bio: Catherine Anderko is certified by the American Board of Health Physics and by the American Board of Radiology in Diagnostic Physics. She is Vice President of Radiation Safety and Health Physics at West Physics Consulting and Radiation Safety Officer at Thomas Jefferson University Hospital in Philadelphia.*

**>Break<**

10:15am – 11:00am **USP 825 Nuts and Bolts for Rad Safety Officers** (Virtual)
Michele Panichi-Egberts, RSO, FSNMMI-TS

Abstract: U.S. Pharmacopeia (USP) general chapter <825>, "Radiopharmaceuticals: Preparation, Compounding, Dispensing, and Repackaging," is a standard to provide minimum requirements for the preparation, compounding, dispensing, and repackaging of sterile and nonsterile radiopharmaceuticals. This presentation focuses on components of USP <825> specific to the Radiation Safety Officer and the nuclear medicine technologist for a better understanding of obligations when preparing radiopharmaceuticals for clinical use. This chapter reflects the unique properties of radioactive drugs and emphasize the importance of following good radiation safety practices and balancing with aseptic handling practices.

*Bio: Michele is currently the Radiation Safety Officer for Nuclear Diagnostic Products located in Cherry Hill, NJ. She also oversees pharmacy compliance for NDP. Prior to becoming an RSO in 1999, she was the Assistant Director of Radiology at Virtua Marlton. Michele is a Fellow of the Society of Nuclear Medicine and Molecular Imaging.*

**>Break<**

11:15am – 12:00pm **Debunking Myths and Urban Legends in Ionizing Radiation Dosimetry** (Virtual)
Chris Passmore, CHP

Abstract: Urban legends and myths regarding various dosimetry technologies have been promulgated throughout the health physics community. This presentation deals head-on with several widely quoted myths about various external dosimetry technologies and limitations of various dosimeters associated with accreditation testing. The presentation examines data from scientific studies and published papers in relation to key type testing parameters of dosimetry systems including fade and lower limit of detection. In addition, NVLAP scope of accreditation will be compared for various dosimetry technologies and what this could mean to a Radiation Safety Officer in selecting an appropriate dosimeter for the radiation fields encountered by the workers.

*Bio: Chris Passmore is a certified health physicist with over 31y of experience in dosimetry and a former lead U.S. Department of Energy Laboratory Accreditation Program (DOELAP) assessor and a current National Voluntary Laboratory Accreditation Program (NVLAP) for NIST in ionizing radiation dosimetry. He is the Chief Technology Officer (CTO) for Radiation Detection Company and still provides dosimetry consulting services through Passmore Dosimetry. Prior to consulting and joining RDC, Mr. Passmore worked 21 y at Landauer and 10 y in the DOE nuclear weapons complex managing external and internal dosimetry programs at Rocky Flats and Pantex. Mr. Passmore is an internationally known expert in dosimetry, radiation monitoring, radiation field characterization, regulatory compliance, and accreditation programs.*

12:00pm – 01:00pm LUNCH

01:00pm – 01:15pm DVSRS Announcements

01:15pm – 02:00pm **Update to Emerging Technologies Using Unsealed Radioactivity in Veterinary Medicine…and Humans** Chad Smith, PhD, CHP, DABR

Abstract: This presentation discusses two "new" uses of unsealed radioactivity for veterinary therapy of osteoarthritis and destruction of tumor tissue. The content will cover regulatory challenges of bringing a new technology to the market, applicable guidance documents, and some unique licensing features of agreement states. We will also forecast these therapies into human medicine how that will impact medical and health physics professionals.

*Bio: Chad Smith, PhD, CHP, DABR is a partner at FX Masse Associates Inc, a physics consulting firm in Massachusetts, as well as a Certified Health Physicist, and Diagnostic Medical Physicist by the ABHP and ABR respectively.*
*He likes to play golf when not chasing his three kids around.*

**>Break<**

02:15pm – 03:00pm **Managing Dosimetry in a Large Health Care**
Mark Pflug, MS, RPPT, CHMM, CLSO, CMLSO

Abstract: With more than 1,600 occupational workers spread across five counties and 65 individual locations, monitoring workers' exposure can be a challenge. This presentation discusses barriers and opportunities for identifying trends of the seen and unseen. While monitoring exposures that approach ALARA thresholds is important, it is equally necessary to monitor low exposures for reasons of compliance. This discussion will cover the significance of standardization, audits and surveillance, and creative data manipulation to help uncover interesting information that may otherwise have been missed. This presentation also will examine how novel approaches may be useful in developing a comprehensive radiation safety program.

*Bio: Mark is the Director of Environmental Health and Radiation Safety at Cone Health (Greensboro, NC) and for the past 10 years has served as the system wide Radiation Safety Officer. Cone Health is a 13,000-employee healthcare system located in central North Carolina. The Cone organization covers five counties and has 13 RAM licenses and over 50 X-ray use facilities. Mark is also the current RSO of Greensboro Imaging, The Breast Center, Guilford Pain Management, and Solis Mammography.*

**>Break<**

03:15pm – 04:00pm **Occupational Dose Reductions During FDG Administrations at a Large Cancer Care Center**
Brian Quinn, MS

Abstract: Occupational dose to cancer care staff from FDG PET procedures is actively managed with appropriate radiation protection management practices, routine review of dose and dose trends, and interventions when needed. This presentation provides an overview of occupational dose management principles in this setting, explains the importance of appropriate analysis methodology, and presents initial dose reduction results from the introduction of a PET infusion system.

*Bio: Brian Quinn is a Medical Health Physicist at Memorial Sloan Kettering Cancer Center in New York.*
*He has over 20 years of experience in Health Physics, Medical HP, University HP, and radiological decommissioning. He collaborated with NCRP on Million Person Study efforts and has previously authored studies of organ dosimetry for PET, CT, fluoro and dental radiography. Brian is the currently Executive Secretary of the Greater New York Chapter of Health Physics Society.*

**>Break<**

04:15pm – 05:00pm **Dose Estimates to Personnel from the Radioactive Materials Portion of Y-90 only During these Treatments** Andy Miller, MS, CHP, FHPS

Abstract: During Y-90 microsphere treatments, workers receive occupational dose from fluoroscopy use and from the Y-90 microspheres. The dosimeters in use by the workers integrates the doses received from both sources during the wear period. The occupational dose received from the fluoroscopy use on each patient is highly variable and dominates the occupational exposure for the physician. The occupational dose received from the Y-90 sources is estimated by dose rate measurements and time/motion studies to provide a tool to provide customizable dose estimates for each user based on their tasks. This information can be used to better educate staff members in the interventional radiology suite who work with these patients. This will be a more detailed version of the methods and equipment used to develop a paper submitted for presentation at the meeting.

*Bio: Andy Miller is the RSO at the Cleveland Clinic. He is a certified health physicist, fellow of the HPS, and current president of the Medical Health Physics Section of the HPS.*

05:00pm – 05:15pm Closing Remarks