PDS Registration Information

Hands-on Medical Health Physics
Emerging Technologies & Challenges

PDS follows a new format aligned with the Annual Meeting of the Health Physics Society. Wednesday lectures at the Cleveland Convention Center allow;
- Attending both the annual meeting and PDS in the same week
- Wednesday afternoon lectures offered as PEP & CEL.

New format;
- PDS will relocate to Case Western Reserve University (CWRU) after Wednesday lectures (*transportation is provided*).
- Transportation is provided to the Wednesday night-out tour/lecture/dinner sponsored by Philips and then to the Courtyard Marriott on the campus of CWRU.
- Thursday/Friday lectures are at CWRU followed by break-out sessions hosted by PDS sponsors.
- Transportation is provided to/from breakout sessions on Thursday/Friday.
- Second night-out on Thursday dinner/panel discussion hosted by vendor/sponsors.

Break-out Sessions; (*assigned based on your ranking & slots available*)
Four hours of instruction w/ hands-on experience. You will rank your top three choices when registering (*you will attend 2 break-out sessions*).

MRI Safety, University Hospitals of Cleveland

The MRI safety session will focus on several technical subjects related to oversight and evaluation of MR safety in medical facilities. Participants will review the findings and recommendations of a root cause analysis of a fatal accident that occurred in an MRI department and discuss related issues for other high-profile safety incidents reported in the news media. Participants will have small-group discussions of strategies and scenarios encountered in auditing MRI facility safety programs and will construct an MRI safety audit tool. Implanted medical device safety scenarios will be considered using real-world implanted device specifications and scanning scenarios, to examine the physics and safety considerations of each. Participants will have the opportunity to self-assess their knowledge with the group using a quiz-show format. Attendees with experience or responsibilities for MRI safety are encouraged to bring questions and concerns from their own practices to discuss with their co-participants and instructor.

David Jordan
Senior Medical Physicist, University Hospitals of Cleveland
NucMed Hot Laboratory Hands-on, Cleveland Clinic Foundation

This session provides instructions and hands-on demonstrations of nuclear medicine hot lab operations.

*Mirion Technologies will provide dosimetry and instructions using InstaDose®.

Instrument Calibration/Repair/Nuclide ID/Tour, Case Western Reserve University (CWRU) with LACO & Ludlum

- This session provides a tour of the CWRU Radiation Safety Department with emphasis placed on their survey instrument calibration and repair facility. Breakout session is co-sponsored by LACO & Ludlum instruments who are providing state-of-the-art instrumentation and instructors for hands-on experience:
  - Calibration/Repair of survey instruments with instructions provided by Jenifer Warren, Ludlum Measurements Inc.
  - Use of survey instruments for Nuclide ID with instructions provided by Gary Oyler, LACO Inc.

Medical Physics Testing X-ray & QC, VA Healthcare System

This breakout session is primarily aimed at teaching ‘survival skills’ for RSOs that are tasked with Acceptance testing and routine QC of diagnostic x-ray producing equipment. Participants will become familiar with the current regulatory requirements in testing of a general Radiography and Fluoroscopy room and the differences between routine QC versus equipment acceptance testing. The participants will also perform phantom measurements to characterize the dose, including the ‘reconstruction’ of patient dose for past cases, and will test the image quality of the system. Special emphasis will be placed on:
  - Measurement of maximum x-ray output and the specific point of measurement for different fluoroscopy devices.
  - System High Contrast spatial resolution and focal spot size.
  - System Low Contrast resolution.
  - Measurement of beam quality in Fluoroscopy system.

A ready-made QC and acceptance testing excel spreadsheet will be provided to all participants for use at their facilities.

*All equipment for this break-out session has been provided as courtesy by LACO ([www.LACOonline.com](http://www.LACOonline.com))
Establishing an effective radiation dose management program requires embracing a safety culture that is supported by tools and multidisciplinary collaboration. Radiation dose tracking solutions are becoming a seamless part of radiation safety’s workflow ensuring in near real time that your organization remains compliant – and your staff and patients safe. Elements such as imaging protocol harmonization across the institution, data recording and analysis, patient education on radiation awareness, and a common set of expectations regarding departmental safety are key to success.

Measuring dose is just the beginning. How you use that data to create a structured, sustainable safety culture is the objective of this breakout session.