

**78th Annual OSRT Meeting
Course Descriptions**

Thursday Sessions

T01: Ray Berg Memorial Lecture- OSRT: Past, Present & Future-Lauren Huffman, M.A.Ed., RT(R)(CT)

This presentation explores the history of professional societies, their purpose and importance as an influential body for the radiologic science professions. Affiliate society functions have evolved over the years and have proven very effective as advocates of health policies at the State level and as an influential body concerning national issues. The importance of maintaining professional societies and continuing professional concerns will be addressed.

T02: Characteristic or Compton: Which One is It? - Julie Gill, PhD, RT(R)(QM)

X-ray production processes are addressed along with the interactions with matter as they pertain to diagnostic radiography. Tips for understanding the differences between them with an emphasis on key terminology and diagrams.

T03: Holistic Admission Usage in Radiologic Technology Programs- Heather Moore, M.Ed., RT (R)

This presentation will share the results of a research study about Radiologic Technology programmatic admission criteria. The focus of the study was on the use of holistic admission practices, which includes a balanced assessment of student experiences, attributes, and academic metrics. This type of admission practice is reported to increase the number of diverse students admitted to healthcare programs and is proposed as a way to decrease health disparities by increasing the number of minority healthcare providers who care for patients.

T04: Patient & Family Centered Care in Radiology-Barbara Swartz, BA, RT(R)

The presentation will focus on introducing patient and family centered care into the radiology setting. As patient satisfaction is increasing tied to reimbursement, it is essential to create an environment in which patients feel well-cared for, that their needs are being met, and that their values and choices are being respected. Typically, in radiology we spend less time with patients than other services such as inpatients or emergency department visits; therefore, we have a shorter amount of time to create and foster an environment of care, trust, and respect.

T05: A Partial Crash Course in Equipment Operations-Yasser Jahami, MS, RT(R)

This presentation addresses equipment operations with special emphasis on the components of the X-ray tube, and AEC. The purpose and operating concept under which the X-ray generator, transformers, and rectification system perform is also covered. In addition, some relevant points are explained that would lead the audience to understand how different parts of the X-ray equipment work together.

T06: African-American Student Success: A Transformative Study of Student Engagement

Tracy Herrmann, M.Ed., RT(R)

African American medical imaging student success (i.e., flourishing and academics) is influenced, compounded, and hindered by circumstances and complexities associated with racism, higher education, and healthcare. Implementation of student engagement practices is one solution toward enhancing the learning experiences and success of African American medical imaging students. This presentation includes the findings of a mixed methods study of African American medical imaging students and alumni from primarily white institutions of higher education in a highly-segregated Midwestern urban geographic area. Study findings and recommendations regarding student engagement will be discussed with an emphasis on student and alumni perspectives.

T07: Ready or Not Here They Come...Baby Boomers-Donna Endicott, M.Ed., RT(R)

With the aging population in the United States, this group of people will present a unique set of problems to the healthcare system. To meet the needs of this age group, the radiologic technologist must be aware of the aging process. How do the human senses change as we age? How does movement and balance change as we age? How can technologists help guide these patients through the radiology department and their examinations? These processes and solutions will be covered in this presentation.

T08: Roy E. Bell Memorial Educator's Luncheon-How Can Mindfulness Help You?

Vicki Luster, MS, RT (R)(CV)(CT); Pam Callahan, MSE, RT(R)

Healthcare providers sometimes may need some mental assistance when caring for their patients. The pace of work and the demands from both the institution and the patient can cause providers to lose focus. Learning how to be Mindful may be the answer to coping with these stresses. Mindfulness is being aware of the present moment while not immediately reacting to situations, and choosing how to react. We all can be mindful, but often it is a matter of training. Meditation is a way of training the brain to not be reactive, to slow down and experience the present becoming aware of what we are thinking and how our body is reacting. Practicing Mindful meditation can result in daily improvements in health, relationships, focus, stress and perception.

T09: Philip W. Ballinger Self-Assessment Exam for 2nd Year Radiography Students Coordinated by: Department Faculty from Kent State-Salem (Must be pre-registered).

T10: Human Trafficking 101 – Bhumika Patel, M.A.-Anti-Human Trafficking Program

Human trafficking is a form of modern day slavery that is currently occurring globally; overseas and locally. Human traffickers exploit men, women, and children using force, fraud, or coercion for the purposes of commercial sex or labor. This 50-minute presentation explores trafficking and related laws, indicators of trafficking, identifying victims and the role of health care professionals.

T11: Human Trafficking & Victim Identification- Bhumika Patel, M.A.-Anti-Human Trafficking Program

Trafficking of humans is a grim problem both globally and locally. Service provision and victim identification need to be strengthened to better serve human trafficking victims. Health care workers may play a key role in the intervention process.

T12: Pharmacology: Just the Basics-Mara Weber, Pharm.D, BSRT

A basic understanding of pharmacologic principles is key for radiologic technologists. This fundamental knowledge can help imaging professionals better understand how medications work and interact with other medications, notably contrast media. Understanding these principles can increase patient safety through an understanding of possible adverse reactions.

T13: Peer Review of Course Design: Because Quality Matters! Tiffany Roman, M.A.Ed., RT (R), (MR), (CT)

Due to the accessibility of online and distance courses in education today, there must be a system for assuring quality and to ensure meeting the needs of online learners. Quality Matters (QM) is non-profit organization that has develop a rubric and peer-review process for institutions to evaluate any online course. This system helps verify that students are receiving the highest quality educational experience. QM standards will be explained and examples of how to meet the standards will be provided.

**T14: The Ins and Outs of Planning and Building Medical Imaging Educational Laboratories
Kerry Mohny, MA, RT(R)(M)**

Considerations in planning and building medical imaging educational laboratories are addressed. "Lessons learned" will be shared regarding "what works" and what could be planned or constructed differently. Audience members will be introduced to stages of planning and constructing, how to

communicate with non-imaging construction and educational team members, budgetary considerations, and how to get the best educational return on investment in the physical make-up of lab equipment and space.

T15: HPV: More than a Woman's Disease-Julie Gill, PhD, RT(R)(QM)

The human Papillomavirus (HPV) was first discovered in skin warts in 1949. However, with the rise in human sexual activity, the disease now contributes to many strands of cervical cancer. Discussion will include diagnosis, treatment of diseases caused by HPV, and prevention

T16: Image Production Concepts-Whitney Reese, M.Ed., RT(R)

This presentation addresses concepts related to image acquisition and evaluation. Quality Image production involves proper selection and use of various factors affecting receptor exposure, image contrast, spatial resolution and distortion considerations. Digital imaging characteristics will also be addressed.

T17: Student Open Forum – Brandon Rapp; Rebecca Jones; Josef Steinbrunner; Jessica Bates, Director
Open to All Students! OSRT Student Leaders lead discussions for students.

T18: Educator's Open Forum—Leslie Winter, MS, RT(R)

JRCERT Update and open discussion

Friday Sessions

F1: ARRT CQR Readiness: RT Self-Assessment

This self-assessment is offered free by OSRT to the first 25 pre-registered RTs or RRAs to assess readiness in meeting the ARRT Continuing Qualification Requirements. All RRA.s, and RTs who earned their credentials on or after Jan.1, 2011 must complete ARRT's Continuing Qualifications Requirements (CQR) every 10 years.

F2: Injecting Confidence in Your Team-Jeff Smith, M.S., R.R.A., R.T.(R)(CT)(MR)(QM)(VI)

The difference between a world class healthcare team and the mediocre team is its confidence. If you bother to show people that you believe in them you are more likely to win. Simply supply council, staffing, and resources while defaulting to open source transparency and staying within budget. Some team members will never take off. However, the small percent that do will be such passionate owners of the organization they will fulfill a greater destiny and legacy beyond what any single individual could've ever accomplished alone.

F3: Introduction to FASD-Fetal Alcohol Spectrum Disorder-The Role of Health Care Professionals in Prevention, Judy Kronenberger, Ph.D., RN, CMRS, CMA (AAMA)

Alcohol consumption during pregnancy increases the risk of alcohol-related birth defects, including growth deficiencies, facial abnormalities, central nervous system impairment, behavioral disorders, and impaired intellectual functioning. Fetal alcohol spectrum disorders (FASD) is an umbrella term used to describe this range of effects that can be caused by exposure to alcohol in utero. This presentation focuses on the research behind fetal alcohol spectrum disorders, the cost to individuals and society, and the role of healthcare professionals in preventing these disorders.

F4: Nuclear Medicine Basic for the Non-Nuclear RT-Ryan Smith, DH Sc, CNMT

The purpose of this session is to provide a fundamental understanding of some of the more traditional and most common nuclear medicine technology procedures. This is designed specifically as an introduction into nuclear medicine for RT's of all modalities outside of nuclear medicine. A brief explanation of nuclear medicine theory will be discussed including radiopharmaceuticals, dose administration, radiation safety and imaging. The primary imaging procedures to be discussed

include Cardiac, Bone and Lung. Both normal and abnormal images will be presented. With these basics, the attendee should be more equipped to comfortably discuss with patients what to expect on an upcoming nuclear medicine exam.

F5: How CMS Requirements Will Impact Advanced Medical Imaging Orders in 2018-

Amanda Golsch, MBA, RT(R)(MR)

Congress instructed CMS to specify a program which will require physicians to consult with a qualified clinical decision support mechanism that relies on appropriate use criteria when ordering imaging exams. Decision support is a powerful tool within the electronic medical record (EMR) that assists physicians during order entry. Appropriate use criteria are considered the backbone of decision support. This criterion gives providers an appropriateness score driven through both the procedure selected and indication. Low scoring procedure and indication pairings trigger a best practice alert within the EMR system. The overall goal is to give providers ordering guidance, cut down on changed orders, and fulfill the 2018 CMS mandate.

F6: More Than Just Lead: Radiation Dose Reduction Techniques in CT-

Kelly Dragomir, BA, RT(R), (CT)

Computed Tomography imaging capabilities are rapidly growing and expanding – now encompassing highly specific imaging of the heart, brain, and vasculature. Currently, there are significant misconceptions of patient radiation dose in CT by physicians and other healthcare professionals. The evolution of CT has led to a dramatic increase in the number of CT exams ordered annually. This presentation is designed to provide the imaging professional with a basic understanding of imaging methods in radiography compared to CT which provides the basis for increased radiation dose. Technologists and students will have a better understanding of conventional dose reduction techniques and will be exposed to current methods used to minimize dose on modern CT scanners.

F7: Rose B. Fitz Memorial Luncheon - All attendees welcome; Pre-registration required

F8: Communicating with Older Adults-Tricia Upton, MS, RT(R)

This presentation addresses the importance of effective communication with older adults, identification of barriers of communication in the clinical environment, and ways to overcome barriers. The target audience for this presentation is healthcare providers, specifically those involved in imaging. The information presented will focus on the imaging environment, and will identify specific obstacles and special considerations needed when providing care in the imaging department. This topic is important to the imaging field, as it will significantly impact the perception of quality of care, can affect the quality of life of the patient during and after the examination, can impact the comfort and security of the patient during imaging, and will influence a healthcare provider's overall professionalism, both morally and legally.

F9: Ouch, I think I need an X-ray-Tricia Leggett, D.H.Ed., R.T.(R)(QM)

This 50-minute presentation covers various fractures and the mechanisms of injury. Fracture treatment options are explored. Participants will be asked to identify from radiographic images, various fractures and treatment employed.

F10: Because They Are Child-Size, The Radiation Should be Too!

Cieara Presley, BS, RT(R); Robert Knecht, RT(R)

When performing pediatric radiological exams, there are several key topics to consider that will facilitate the success of your study: Radiation Safety, Child Life Specialists (CLS), and Procedural Tips/Tricks. Radiation safety carries accentuated importance in pediatric fluoroscopy. Employing several specific strategies can greatly reduce radiation exposure during pediatric fluoroscopy. Pediatric fluoroscopy and general radiology exams utilize different imaging approaches compared to adult radiography. Pediatric

specific tips/tricks will be addressed. Child Life Specialists (CLS) are experts in patient growth and development. If available for the imaging procedure, CLS members can increase in patient satisfaction, decrease in radiation dose, and increase diagnostic quality.

**F11: Volume-to Value-Based Reimbursement: Impact on Hospitals and Radiology-
Jordan Hermiller, MHA, RT(R)(QM), CPHQ**

The purpose of this course is to demonstrate the trend for healthcare reimbursement shifting from a volume-based to a value-based model. With financial gains no longer tied to each exam, strategies for financial viability focus on enhancing the value of our services while curtailing costs. After gaining a general understanding of this concept, the conversation will shift to organizational and, more specifically, radiology department strategies to succeed in this changing environment.

F12: Elevating Quality with Technologist Driven Initiatives-Quentin Moore, MPH, R.T.(R)(T)(QM)

Imaging departments are expected to routinely evolve quality, safety, and performance practices. The need for quality-related solutions has grown vastly, largely in response to the growing focus on the patient experience and the technological evolution in our field. This presentation seeks to expose medical imaging professionals to continuous quality improvement culture to empower others to solve issues rather than overlooking problems. The necessary framework and tools described in the presentation are intended to help the technologist understand improvement tools to facilitate change in their respective imaging environment.

Saturday Sessions

S1: Millie Broadhurst Memorial Lecture - The Opioid Addiction Crisis in Ohio: A Roadmap for Response- E. Kelly Firesheets, PsyD, Interact for Health

This session includes three parts: 1) A brief overview of the history of the opioid crisis, with a history of the evolution of the crisis in Ohio, 2) An explanation of the current state of the crisis, including data to outline the scope and scale of opioid addiction and related problems, 3) An overview of the current response efforts in the state. The presenter will provide evidence-based solutions to the crisis, and recommend ways that health care members can respond as professionals and individuals.

**S2: Opioid Crisis: Implications for Healthcare-A Panel Presentation-
E. Kelly Firesheets, PsyD, Interact for Health (facilitator); Sara Bolton, The Health Collaborative;
Laura McCreadie, Hamilton County Public Health; Carol Baden, Ohio Attorney General's Office; Larry Graham, MD, Mercy Health**

In this session, Dr. Firesheets will lead panelists in discussing the opioid crisis, and how it impacts the healthcare system. Participants will explain how health systems and its members can and should respond to the crisis – through prevention, treatment, and connections to care.

S3: The Overdose: From Receptors to Rescue - Mara Weber, Pharm.D, BSRT

In the last few years the amount of drug overdoses has skyrocketed. As a key healthcare professional, radiologic technologists are often on the front line in these clinical scenarios. A key understanding of drug overdose, symptoms and treatment will help professionals understand what is occurring in each step and help assist in patient care.

S4: Medical Imaging of Individuals with Autism Spectrum Disorders-Jerry Tyree, MS, RT(R)

Medical imaging of individuals with Autism Spectrum Disorders can be difficult. In addition to difficulties with communication, there are also behavioral issues, medical issues, and environmental concerns that need to be examined. There are important steps that should be taken before the patient is brought into the examination room and, in some cases, before they come to the imaging facility. The purpose of this

presentation is to familiarize the technologist with common challenges encountered with individuals on the Autism Spectrum.

S5: Glio What? Brain Cancer Treatments from a Brain Cancer Survivor -Shelley McGuire, MS, RT(T)(R)

This course will describe and evaluate multiple types and treatments of brain tumors seen in cancer facilities. From surgical intervention to radiation to chemotherapy, treatment is continually advancing. Optune, a new treatment regime for Glioblastoma Multiforme will be discussed, along other upcoming treatments for brain cancer. The views and experiences on brain cancer, treatment, and survival will be interpreted through the life of a therapist, who is also a survivor.

S6: Digital Playin' With - Philip Ballinger, PhD, RT(R)

For over a hundred years, radiographic exposure theories have been developed using-screen techniques. With the introduction of digital imaging, most exposure techniques have essentially remained unchanged; however, the exposure impact on the digital image may, or may not, be different. Too often the exposure indices are not evaluated or understood. This presentation compares and evaluates the exposure indices used by all major manufacturers of radiographic equipment and how the numerical values are used in creating a quality image.

S7: Compilation/Overview of Electronic Media Used by Radiation Sciences Faculty

Terri Bruckner, PhD, RT(R)(CV), Philip Ballinger, PhD, RT(R)

There is a wealth of electronic media available to radiologic science faculty. These include media from online publishers, computer programs, smartphone apps, electronic simulation units, and positioning assistance found on new radiographic equipment. The presenters have compiled and categorized lists of known websites to show samples of many of the currently available products. All identified resources will be summarized and presented in a format with hyperlinked sites made available for those interested.