Association of Collegiate Educators in Radiologic Technology
44th Annual Conference
Course Abstracts

1. Health Care and Transgender Patients

This presentation would work for any audience as it will discuss caring for the transgender patient, specific health care needs ensuring respect and support of a patient's gender identity when coming to your setting for care.

3. D^3: Leadership Principles of the Daring, Drastic and Deranged

This presentation will explore leadership principles of beloved and controversial leaders. Throughout the presentation, attendees will be provided with examples of well-known leaders and their (sometimes) controversial decisions or lifestyles. Attendees will leave with a better understanding of various leadership principles and an appreciation for those individuals with the passion and willingness to take a stand for what they believe.

4. Accessibility in the Radiologic Technology Program

Accessibility is the right of every student to be able to use all course materials in an educational setting. This is a mandate from the Americans with Disabilities Act (ADA). This presentation will provide information on the requirements to make courses accessible along with a suggested plan of action. Live demonstration of how to utilize Word and Adobe Acrobat reader to make documents accessible will be included as well as a demonstration of how to make video captions in D2L. Also included will be personal narratives of my struggles to obtain an education as a disabled individual. Finally, I will also share lessons learned from the journey that my college, Lansing Community College, is currently undertaking to make all courses and material accessible for all students.

5. Practical Approach to Coaching Versus Mentoring and the Missing Link

This presentation is intended to go beyond textbook illustrations of coach and mentor roles in the clinical setting. We will provide methods, examples, and perspectives of various clinical instructors. As the student's education and learning experience is not successful by our efforts alone, the student perspective will also be investigated. We come across students with varying levels of capabilities and learning styles. There are times when students struggle to put it all together. These students need guidance but don't know where to start or how to ask for help. As educators, we tend to focus on how we can best help the students succeed. However, the question that really needs to be addressed is how we can get the student involved in taking accountability for their own education. Our goal is to demonstrate the need for educators and students to work together to achieve this goal.

6. Your Radiography Brand – Living Ethical, Legal and Interpersonal

The ARRT content specs for the Ethical, Legal, and Interpersonal Communication will be covered; however, more importantly, students will hear stories that illustrate how to apply this knowledge to the realities of health care and patient care. While the role of the radiographer is to perform procedures, ethical, legal, and interpersonal communication factors are always in play. This presentation will teach above the boards to practical application, and how knowing this information for a board exam is just the beginning of developing best practices in the radiography field. Students will engage in activities that will help them see the importance of having a "radiography brand" that incorporates living what they know.

7. Digital Radiography: When the Safety of Low Dose Radiation Creates Sloppiness

There is an unspoken perception when using digital radiography that there is little to no radiation dose risk to the patient or to the technologist. When using Digital Radiography, there is a tendency among technologists to be less concerned about technique and shielding. Digital Radiography has also created an environment where repeats are the norm, especially with direct capture. This new culture of disregard for technique, positioning standards and repeats has led to "dose creep" to both our technologists and patients.
After noting why Digital Radiology is low dose, this lecture will discuss various clinical case scenarios and identify poor practices which increase radiation exposure to the technologist and patient. *Best Practices in Digital Radiography*, as published by the ASRT, as well as the Image Gently and Image Wisely safety checklists will be presented and discussed as a way to improve and implement these standards.

8. Here We Go Again – Standards Revision Part 1

The **Standards for an Accredited Educational Program in Radiography, Radiation Therapy, Magnetic Resonance and Medical Dosimetry** undergo a review and revision process every five years. The revision of the **Standards** is a comprehensive review process that will assist in determining the validity, reliability, and ease of interpretation of the **Standards**.

Part 1 of the presentation will provide participants with an overview of the Draft 2 of the revised **Standards** that become effective January 2021. Participants are encourage to provide comments, seek clarification, ask questions, and make recommendations for Draft 3.

9. Do It With Passion or Not At All

Being a clinical instructor can take its toll year after year, student after student. Some students are great, others take every ounce of our good energy just to make it through the day. It's a difficult and sometimes thankless job. It's easy to lose sight of what our job is as a clinical instructor when we have hard "moments" or "students". It's easy to forget the goal we had in mind for them at the beginning of their journey.

In health care we are embarking on a new demographic of students with different expectations and challenges then what we are used to. Students are more demanding, more lazy, more this and that, that make them difficult to not only teach, but to deal with. However, the job of a clinical instructor is to do their best at all times to work with these students to help them be successful. It's not always easy or fun. I believe if we can correctly identify these "new students" and what they need, we can increase our daily success and decrease the difficult moments. If we change our perspective from "this is his how I teach, this is what I want", to asking, what is it they need, what can I do, how can I help, what is my role, then I believe it doesn't matter what the challenges are, they can be overcome and the success will be that much more beautiful.

10. Head to Toe Review of Radiographic Procedures Part 1

This lecture will cover content as outlined in the 2017 content specifications for radiographic positions and projections defined by ARRT radiography examination. The transition of content specifications will be discussed for Junior and Senior level students. The speaker will prompt students to actively participate and compete in answering mock registry questions and answers during the live lecture. Study tips and mnemonics will be threaded throughout the lecture.

11. Here We Go Again – Standards Revision Part 2

The **Standards for an Accredited Educational Program in Radiography, Radiation Therapy, Magnetic Resonance and Medical Dosimetry** undergo a review and revision process every five years. The revision of the **Standards** is a comprehensive review process that will assist in determining the validity, reliability, and ease of interpretation of the **Standards**.

Part 2 of the presentation will provide participants with an overview of the Draft 2 of the revised **Standards** that become effective January 2021. Discussion regard the specific objects to be revised will be included. Participants are encourage to provide comments, seek clarification, ask questions, and make recommendations for Draft 3.

12. Why is US Healthcare Ranked Dead Last Compared to Other Countries?

Everywhere around the world, factors that impact the quality of healthcare include not only health service accessibility, but also treatment rates. With U.S. statistics reveal less-than-stellar rankings, one may expect per person healthcare spending in the US to be partly to blame. However, the US has the highest healthcare costs in the world. The key for improving healthcare in our country must include an upward trend in the quality of care and cost control.

13. Head to Toe Review of Radiographic Procedures Part 2

This lecture will cover content as outlined in the 2017 content specifications for radiographic positions and projections defined by ARRT radiography examination. The transition of content specifications will be discussed for Junior and Senior level students. The speaker will prompt students to actively participate and compete in answering mock registry questions and answers during the live lecture. Study tips and mnemonics will be threaded throughout the lecture.

14. Transitioning from Technologist to Faculty: Tips and Tricks

My presentation will cover reasons why educating new faculty on effective educational practices is so important. With the current trend of baby boomers retiring and leaving industry, and incoming generations being of smaller populace, faculty positions could be hard to fill. I want to discuss common issues new faculty face, such as differences in learning styles across generations, and why these differences exist. For example, Baby boomers ask many questions while those of the Generation x ask minimal questions. I will help the audience to find their own learning styles through polling, and explain ways to utilize effective teaching practices to reach all students, regardless of learning style. I will discuss the importance of learning objectives and why they are so useful, as well as discuss effective communication and questioning, to promote student engagement. To conclude, I will share with the audience my favorite ways to build positive student/faculty rapport.

15. If I'd Only Known: The Red Flags of Student Suicide

This lecture will discuss current statistics of completed/attempted suicides and include personal accounts of: a suicide survivor, family member of a suicide survivor, faculty of student who committed suicide. A portion of the talk will be on the mental health crisis and why it is growing on campuses across the US. We will discuss challenges faced in colleges, as well as the impact suicide has on our medical imaging community and students. Reasons behind suicidal ideations, contributing factors and common methology will also be discussed. Additionally covered are warning signs exhibited by suicidal students and recommendations for faculty/staff intervention. Lastly, I will address self-care for educators who have had students and/or patients in the suicidal category.

16. Artificial Intelligence: Deep Learning in Medical Imaging

Medical imaging systems are starting to integrate IBM Watson artificial intelligence technology into workstations to aid radiologists in making diagnoses in patients. Artificial intelligence (AI) technology, also referred to as deep learning or machine learning, is already being utilized in some mammography cases and has potential in all radiology modalities to improve workflow, patient care, and patient throughput. When a radiologist opens a study to read it, the AI technology will make a preliminary diagnosis with the help of additional patient information pulled in through the EMR. The more this technology is integrated into medical imaging modalities, the more technologists will need to be aware of how it works and what they can do to make the process even better.

17. Creating an Educational 3D Printing Lab and Curriculum: Learning Curve of Year One

Medical Imaging professionals (radiographers, sonographers, etc.) are increasingly involved in 3D printing in medicine. Our program invested in 3D printing equipment and established a lab in an effort to meet the needs of future imaging professionals to have experience and knowledge of medical 3D printing. Program faculty can benefit from us sharing our experiences, and to a certain extent, clinical faculty whose departments/hospitals may be entering the 3D printing space may as well.

18. Creating a Positive Patient Experience

As hospital and clinic reimbursement is increasingly more dependent on patient satisfaction surveys, it is critical that all medical staff be aware of how the patient experience can be improved. From the hospital CEO, to the physicians, to the janitorial staff, every person working in the medical environment is a partner in ensuring the patient experience is an optimal one. This presentation will discuss the importance of a positive patient experience from both the humanistic and reimbursement perspectives, with specific examples from the radiologic science setting. The participant will also be made aware of ways to increase his/her empathy, and to teach empathy to others.

19. The (Radiation) Safety Dance

This session will review all of the material from the updated content specifications outline for the safety section of the ARRT exam. Topics include radiation physics, radiobiology and radiation protection. Topics also include biological aspects of radiation, minimizing patient exposure, personnel protection, and radiation exposure and monitoring. Additionally, there will be review questions built into the presentation, in the form of an interactive Kahoot session.

20. Using Reflective Learning to Assess Clinical and Didactic Outcomes

Critical thinking is an important skill for students to develop during radiologic sciences programs. Reflection is a tool that can be used to help students connect knowledge learned in the classroom to practice in the clinical environment. This presentation will provide the benefits and drawbacks to using reflection to assess student learning. The results of one programs' use of reflection will be shared as well as tips and best practices for reflection. The implementation types utilized by the program, and to be shared as part of the presentation, include both dialogic and written reflection practices. Specific examples to implement reflection, tools to evaluate the reflection activities within a program and changes made to create a more effective reflection process will be discussed.

21. Emotional Intelligence in Radiology

I will discuss the reasons why compassion and connection are so important. We will look how at the upcoming changes to reimbursements and consumerism mentality will lead to more patients selecting facilities that provide an exceptional experience. Through several examples I will show a correlation between connection and experience. We will look at the Disney model and how it can be used to change healthcare and the patient experience. We will also work through some techniques that will help us show compassion that leads to connection.

22. ARRT 101

This presentation will cover eligibility, application and preparation for ARRT exams. It will Also cover ethics and some common ethics mistakes. Maintaining certification through biennial CE and Continuing Qualifications Requirements (CQR) will be explained.

23. Death by Power Point: Teaching Digital Imaging

In recent years, PowerPoint has become ubiquitous in academia, but its proliferation has not necessarily come with the additional training on how to make excellent presentations of digital imaging. We all have had to sit through terrible PowerPoint presentations peppered with irrelevant cat photos and slides with seas of words, but these presentations are not the most engaging to students. While the teacher may find Fluffy adorable, the class is probably groaning inside because that information is not useful to them or to their learning. The goal of this presentation is to provide some helpful pointers to improve digital imaging presentations and thereby increase student engagement.

24. Joint Commission and ACR Standards – Finding Educational Opportunities from Policies

Most of us are familiar with the state and federal regulations that govern a radiology imaging department. However, many of the hospital policies and procedures are based on guidance from both the Joint Commission (formerly known as JCAHO) and the American College of Radiology accrediting bodies. Recent additions to the fluoroscopy, mammography, CT and MRI standards have been an impetus for policy revision and creation at many hospitals. A review of these standards, policies and compliance recordkeeping may have an educational benefit for the RT student. This talk will review and discuss the details of specific standards, additional quality control procedures and the potential of converting them into assignments (e.g. technical writing, understanding radiation doses, image quality review) for our RT students.

25. Nuts and Bolts of Patient Care

In this presentation I will go over radiographic exam patient care content. The presentation will be delivered with visual aids and power point. In this presentation I will be going over ethical and legal issues and proper communication methods with patients. In the presentation will be going over how to properly transfer patients and the proper mode of transporting patients. In this presentation I will be going over the types of infection control. I will also be covering contrast media administration and identification of medical emergencies. During the presentation I will be giving the students scenarios that they will decide the best solution.

26. Let's 'Explain Everything®' About Adding Technology to the Radiology Classroom

Abstract: The "Explain Everything" app is a low-cost app that any student and/or educator can easily afford that allows for whiteboard recording and can be used in a face-to-face classroom, flipped classroom, or an asynchronous class. This screencasting app allows for the instructor to record the current lecture, or pre-record a lecture, and can effortlessly save as an mP4 or quickly push the content to YouTube. Explain Everything is easy to use and allows the instructor to annotate, draw, make slides, and import images/PPTs/videos within seconds. Using this app allows the instructor to wirelessly mirror the iPad onto the projector screen and enables far more flexibility than standard PPT or whiteboard based lectures. When using other technologies such as "Snagit", it is easy for anyone to add in videos or student drawings on the spot. Solving problems in class? Why not screenshot the students answers and project it up, or have them write right on the iPad and have it saved for future reference. The presenter intends to demonstrate multiple ways to use the app and also be able to "Explain" what the students love about this teaching technology.

27. I Need to Talk to You: Crucial Conversations

Conversations between supervisors/employees, educators/peers, and educators/students, or any combination, happen every day. These conversations are difficult or uncomfortable; most people do not possess skills/tools needed to handle conflict and emotions. This presentation will define crucial conversations and various ways to deal with difficult and seemingly unresolvable conflict arising in conversations.

28. Legal Terms and the Suits no RT Wants to Wear

This presentation reviews the most common law terms that may be tested in the registry examination by both the definition of the terms and by placing the terms in everyday context through the use of actual legal cases involving radiologic technologists within the past ten years. Terms reviewed include malpractice, negligence, assault, battery, respondeat superior, vicarious liability, and tort. Scope of practice is examined using cases which contrast the difference between a physician's scope of practice and a technologist' scope of practice. Giving testimony in court is discussed, including contrasting between what is seen on TV and movies versus what a technologist could expect if called to court in real life. Included in the discussion is not only testimony by the technologist as a defendant in a lawsuit, but the technologist becoming an expert witness and called In medical malpractice cases.

29. Grade Inflation in Radiologic Sciences: A Preliminary Study

This presentation follows up Examining Grade Inflation and Considerations for the Radiologic Sciences, presented at ACERT 2018, which defined grade inflation, examined possible causes, provided implications for the radiologic sciences profession, and explored future areas for research. Based on the literature and informal conversations with didactic and clinical faculty, this study was conducted to determine if entry-level radiologic sciences educators are concerned about grade inflation in their programs. The study background, parameters, results, conclusions, limitations, and recommendations for future research will be presented. Preliminary results indicate grade inflation may not be a concern in entry-level radiologic sciences programs, but several limitations, including sample size, question ambiguity, and study design, must be addressed to gain a truer picture of the phenomena and its effect on radiologic sciences students.

30. I Scanned a Giraffe! Adventures in Zoo Animal CT

This presentation covers several cases of zoo animal CT examinations and discusses various approaches to zoo animal imaging and how they affect animal patient outcomes, including discussion of the challenges related to performing CT examinations on exotic animals of all species and sizes. This lends itself to further discussion of comparisons to human patients regarding positioning, technical factor selection, radiation dose optimization, comparisons of human and animal anatomy, as well as radiographic appearance of normal anatomy and pathologies.

31. The Physics of X-ray Production

A thorough understanding of basic X-Ray physics principles provides a working foundation for Imaging Professionals to create a picture and tell the patients' story in the diagnostic process. To be able to tell the patient's story in image form, the course discussion will assist the participant to understand the; What, Where, When, Why, How, and maybe Who, of Principles of Radiation Physics to include x-ray production, target interactions, x-ray beam characteristics, and interaction with matter.

32. Germ Warfare in Healthcare

A person, going into a hospital is expecting to receive excellent patient care, not get a potentially deadly infection. According to the Centers for Disease Control and Prevention (CDC), healthcare-associated infections affect 5 to 10 percent of hospitalized patients in the U.S. per year. Approximately 1.7 million HAIs occur each year, resulting in 99,000 deaths and an estimated $20 billion in healthcare costs. As Radiology Technologists, we play a very important role in preventing the spread of infection. This presentation will describe the different types of pathogens encountered in the healthcare setting and clarify which ones are considered the biggest threats to our patients. Explanations of why we have so many drug resistant infections and how the CDC is involved in trying to reduce this number. The CDC will be discussed, when and how they started and what their role is in the United States and patient care. As an educator in the Radiology sciences, I wanted to do a topic that is very relevant and serious to the community. We talk a lot about radiation safety (which of course is important) but HAI's can kill. It just isn't nursing or the physician that spread infections, anyone who encounters a patient has the potential to kill.

33. What Millennials Do Right

The generation of students born starting 1980 – 2004 have been labelled Millennials. They are the most diverse generation to arrive to our schools. Teaching Millennials requires approaches that mirror this diversity. While this challenges educators to change their approach, it also opens new methods that improve our ability to teach overall. Methods of traditional teaching are presented that show that meeting the needs of this generation also improves the overall classroom experience. There are some things that Millennials get right.