

## 2012 OSRT Annual Meeting

### Abstracts of Sessions

#### Thursday, April 19, 2012 AEIRS Educator Workshop

##### **Strategies to Spice Up Your Presentations** Tracy Herrmann, MEd, RT(R)

Presentations can be designed for many purposes and a variety of unique audiences. This session will describe ways to share information in an interactive way that is appealing to the senses. Tips for the development and design of engaging presentations will be shared and demonstrated.

##### **Integrating Educational Theories into Classroom Practice** Paula Pate-Schloder, MS,R.T. (R)(CV)(CT)(VI)

This lecture will discuss the application of specific educational theories in classroom management. Both novice and experienced educators are encouraged to attend. Bloom's taxonomy, principles of direct instruction, concept learning, cooperative learning and other theories will be explored. The speaker will share examples of application in a variety of medical imaging courses. Audience participation is encouraged..

##### **Teaching Techniques to Improve Memory Retention** Julie Gill, PhD., R.T.(R)(QM)

"Would you like to learn some interesting techniques to help your students memorize facts?" This session will introduce some of those techniques, whether they be research-proven or common practice. Attendees will also have the opportunity to share their tried and true memorization techniques!

##### **Classroom Communication: Survival of the Fittest** Angie Arnold, M.Ed., R.T.(R)

This session addresses effective communication in an educational classroom, lab and clinical setting. Also discussed will be the importance of listening, how to effectively respond to student questions, how to cope with classroom situations such as technology failure, and ways of handling potentially difficult students and other classroom situations. Attendees are encouraged to bring their own examples to share with the group as open discussion and audience participation is highly encouraged.

##### **Clinical Assessment: Who Is Accountable?** Leslie Winter, MS., R.T.(R)

This presentation will provide a brief overview of the role of outcomes assessment in improving program quality. Emphasis will be focused on the assessment of clinical competency skills and how this pertains to employer satisfaction. Employers desire individuals who can critically think, communicate, manage time, and are knowledgeable in the discipline.

## **OSRT Sessions Thursday, April 18, 2012**

### **A World Wide View of Radiologic Technology** Martin S. Pesce, RT(R)

This course is an overview of radiologic technology training, procedures, and devices used around the globe. As individuals, we tend to view our own approach and style to be the standard, but this program is intended to offer alternative perspectives to our career field.

### **Medical Malpractice** Paula Pate-Schloder, MS., R.T.(R)(CV)(CT)(VI)

This course is designed to increase awareness among imaging professionals regarding risk management and its role in identifying potentially compensable events and decreasing liability. Malpractice and negligence in the hospital and outpatient settings will be discussed. High risk areas and procedures will be reviewed. Audience participation is encouraged.

### **Social Marketing & Radiation Safety** Tracy Herrmann, MEd, RT(R)

Social marketing has become a common tool to promote radiation safety in medical imaging. Initiatives such as Image Gently and Image Wisely highlight safe practices for radiologists and radiologic technologists. These initiatives also raise the awareness of patients, parents, and other healthcare workers. Web resources, social networks, and electronic applications provide healthcare consumers with easy access to radiation information and the ability to record their medical imaging procedures monitor the estimated radiation dose. This presentation will provide an overview of the social marketing initiatives and the electronic resources that promote patient education and radiation safety. Implications for medical imaging professionals will be discussed.

**Friday, April 20, 2012**

**Orthopaedic Trauma**

Darrin Kuczynski, MD

Orthopaedic radiography is essential to the accurate diagnosis and treatment of musculoskeletal injuries. This session will discuss the importance of medical imaging in orthopaedics. The evaluation of radiographs, CT, MRI, and Nuclear Medicine images will be incorporated as well as the standardization of which modality is preferable. Finally, clinical correlation to musculoskeletal injuries will be provided.

**The Use of Standardized Patients in Radiography Education** Karen Latterner, BAS., R.T.(R)/Yasser Jahami, BS., R.T.(R)

This presentation explores the use of Standardized Patients as a learning tool in the education of student Radiographers. A Standardized Patient is an individual who is trained to act as a real patient in order to simulate a realistic clinical scenario. This simulation technique creates a “near-real-to-life” case scenario that is safe, supportive and conducive to students’ learning. It has been shown to be very effective in measuring competency. Through the use of surveys and videotaped sessions, it integrates feedback from students and standardized patients, self-reflection, and an instructor-guided critique to improve students’ technical and clinical skills. With the healthcare industry focusing on customer satisfaction and patient-focused care, students who participate in standardized patient experiences are better prepared for clinical rotations.

**Clinical Value of Fusion Imaging in General Nuclear Medicine** Donald Neumann, MD., PhD

The use of hybrid imaging devices, which physically combine two different imaging modalities into a single integrated system, are becoming more commonplace in the clinical setting. An attractive feature of such instruments is the ability to “fuse” two modalities into a single display. With such displays, the information provided by two modalities can be utilized in a complementary and synergistic fashion, improving both diagnostic accuracy and clinical efficiency. The evolution of fusion imaging in general Nuclear Medicine will be discussed with the assistance of actual clinical case examples.

**Patient Care Review** Margie Iagulli, M.Ed., R.T.(R)

This presentation includes a thorough review of all patient care aspects. The following seven major areas, as defined from the ARRT, will be covered: Ethical and Legal Aspects, Interpersonal Communications, Infection Control, Physical Assistance and Transfer, Medical Emergencies, Pharmacology and Contrast Media. The discussion of each aspect will include key terms and important concepts vital for optimal patient care while interacting with the imaging specialist.

**Best Practices in Creating a Critical Thinking Educational Environment for Radiation Science Students** Nina Kowalczyk, PhD., R.T.(R)(QM)(CT), FASRT

This course presents results of research designed to identify best educational practices in the development of critical thinking skills. The results include information obtained through a

systematic review of the existing literature related to problem solving educational strategies pertinent to the health professions, course observations, and interviews conducted with nine skilled educators in the nursing faculty at McMaster University, Hamilton, Ontario. Identification of problem-based learning educational practices, faculty development, and barriers encountered provide information critical to the development of problem-based learning activities pertinent to the radiation sciences. This is the first step in the development and testing of radiation science problem-based learning programs conducive to the development of critical thinking skills.

### **Digital Breast Tomosynthesis**

Donna Plecha, MD

The only technology that has been proven in randomized controlled trials to decrease mortality rates from breast cancer is screening mammography. Screening mammograms detect breast cancer at earlier stages leading to better prognosis and less toxic treatment options for breast cancer patients. However, screening mammography can miss cancers, especially in women with dense breast tissue. DBT is the next generation of mammography using a 3-D platform. This technology allows for cross sectional visualization of the breast, similar to CT and MRI. Radiologists can now scroll through 1mm slices of the breasts in both the CC and MLO views of each breast. This allows for less call backs since the 3-D reconstructed images eliminate the problem of overlapping normal tissue causing suspicious areas on a 2-D mammogram. Also, studies have shown that masses are easier to detect using DBT when compared to digital mammography. DBT is currently being used as a screening and diagnostic tool at different sites. DBT was FDA approved in February 2011 and is still in its early stages clinically.

### **Interactions: Made easy...or a little less confusing!**

Stacy Beck, MPH., R.T.(R)

This course will review the basic interactions that occur in diagnostic radiology. A brief review will be provided with helpful hints in remembering the basic points of interactions that occur within the x-ray tube, Bremsstrahlung and Characteristic and the interactions that occur within biologic matter, Photoelectric and Compton effects.

### **RUBRICS: Reasons, Uses, & Benefits for Rubrics In the Classroom Setting**

Victoria Migge, MS., R.T.(R)(T)/Shellie Warino, M.Ed., R.T.(R)(T)

This course provides educators in the classroom and clinical setting an overview of the types, uses and evaluation of the rubric. The presenters will show examples and discuss the development of holistic and analytical rubrics for assessment tools, didactic and clinical education.

### **Putting Your Best Fork Forward**

Jamie Clark, BS, Certified Etiquette Trainer

Putting Your Best Fork Forward instills confidence, self-esteem and respect for others by blending the standards of traditional etiquette with contemporary manners. This program includes a 40-minute pre-luncheon program, a 10-minute mixing and mingling practicum, and a 40-minute instructional lunch as participants are enjoying their meal.

**My Patient Is How Old?**

Margie Iagulli, M.Ed., R.T.(R)

This course presents information concerning the optimal imaging of the geriatric population. Statistics concerning age ranges, gender and specific disease processes will be discussed. Conditions of aging as it relates to each system of the body will also be revealed along with specific imaging procedures that may be required for proper diagnoses. Helpful tactics for the challenging geriatric patient will provide guidance for the atypical patient as well.

**Mini Myers Personality Profile** John Carroll, MA, LPC, NHCC, CH

This program features a data analysis from the Myers-Brigs Type Indicator that has been given to seven graduating classes from Henry Ford Community College. The analysis spans radiography cohorts from 2006-2012. Areas to be addressed are: learning styles, teaching styles, communication, problem solving and conflict resolution, critical thinking, and marketing.

**Forensic Radiology: Applications in Evaluation of Injury and Death** Joseph Felo, MD

Although in many instances it will not be required, the capability for or availability of radiologic examination of deceased remains is essential in any modern facility undertaking medicolegal investigation of death. This lecture will concentrate on the practical utility of conventional radiography that are most applicable to the investigation of death, and will highlight the benefits and limitations of postmortem radiography. Topics to be reviewed include: Forensic medical center facilities, equipment, procedures, and personnel; Radiographic applications for identifying remains; Cause and mechanism of death with radiologic correlation; and Radiologic utility of documentation of injury and trace evidence. The lecture will include examples of forensic cases with scene, autopsy, laboratory, and radiologic images.

**Using Games to Enhance Learning** Lauren Huffman, M.A. Ed., R.T.(R)(CT)

This lecture looks into the importance of active learning using different game type activities. The focus will be on active learning and its impact on student engagement and rich learning experiences. Different techniques and examples will be given regarding the use of games in active and collaborative learning. A short collaborative activity is planned to discuss the importance and relevance of active learning.

**Quality Assurance – It's Not Just a Good Idea . . . It's the Law** Dwight Leeseberg, R.T.(R)

This course shows how quality assurance (QA) programs at diagnostic x-ray facilities are regulated by the Ohio Department of Health, Bureau of Radiation Protection. Many of the QA requirements or activities commonly carried out by x-ray department staff are requirements of the Ohio Radiation Protection Rules. The course will touch upon registration requirements, general and specific quality assurance and quality control requirements, the Ohio radiologic license and how to contact the bureau for further information.

**Student Open Forum** Margie Iagulli, M.Ed., R.T.(R) and Beth Deley, R.T.(R)

This Open Forum will provide the students the ability to express and discuss current student issues concerning both didactic and clinical portion of their radiology technology education. The format will include anonymous questions from the participating student that will be reviewed

and discussed in a facilitation format. The facilitators will include both a recent graduate of a Radiologic Technology Program and a current faculty member of a Radiologic Technology Program.

### **Portable Chest Workflow Assessment Between Computed and Digital Radiographic Systems**

Martin S. Pesce, RT(R), Della Abedi-Tari, RT (R), Maureen Seluta, RT (R), M.T. Shore, RT (R)

This course presents results of research designed to profile the workflow and productivity gains comparing portable chest images acquired using predicate CR device against DR. This study was performed at Massachusetts General Hospital (Boston, MA) in conjunction with Carestream Health, Inc. using a GE AMX4 comparing an Agfa needle phosphor system to the DRX-Retrofit System.

### **OSRT Business Session**

This session involves the membership into the function and management of the OSRT. Please plan to attend to provide valuable input into the professional society and its interworkings.

### **Conflict Management**

Debra Stull, B.S. R.T.(R)

This session will introduce and explain the thought processes pertaining to conflict. It will also address conflict management and conflict resolution techniques for utilization in the workplace, improving communication and decreasing stress levels for patients, families and healthcare workers.

**Saturday April 21, 2012**

**IV Administration of Iodinated Contrast Media** Linda Homolka, BA., R.T.(R)

The presentation will briefly describe the benzoic acid ring, showing the difference of ionic and nonionic ROCM. The significance of osmolarity is discussed as it pertains to the body's physiologic response. Next laboratory values and kidney function tests are explained and screening questions are suggested. Discussion will be stimulated as to the concerns a radiographer might have when assuming this responsibility.

**Stereotactic Radiation Therapy** Stephen Gajdos

A specialized type of external beam radiation therapy called stereotactic radiation uses focused radiation beams targeting a well-defined tumor, relying on detailed imaging, computerized three-dimensional treatment planning and precise treatment set-up to deliver the radiation dose with extreme accuracy (i.e., stereotactically). This session will provide discussion on clinical applications.

**CT Screening for Cancer** Peter Apicella, MD

As healthcare professionals, cancer seems so common in our patients, family, and friends. What exactly is cancer and how can we detect cancer early enough to make a difference? This presentation will define cancer and demonstrate the new three-dimensional computed tomography techniques of CT lung cancer screening, virtual CT colonoscopy, and the CT urogram. Patient preparation and exam protocols will be discussed from a community hospital-based perspective.

**CT Simulation of Therapy Patients** Shannon White, R.T.(R)(T)

The course will describe the purpose and steps taken to complete a CT Simulation for radiation therapy. We will review considerations in patient set-up, anatomy and reproducibility as well as defining isocenter and using other modalities as part of the simulation process.

**Mammography and the Detection of Breast Cancer** Jeannette Lynne,  
R.T.(R)(M)(CT)

This CEU presents the current guidelines of screening and the controversy of age and time interval recommendations. Two studies will be contrasted; the National Breast Cancer Screening Study of Canada, and the Swedish Study of Laszlo Tabar used as the American modal. The relative cost of limiting screening and its outcome on mortality will be discussed vs. the diagnosis of later stage tumors.

The anatomy of the terminal ductal lobular unit where breast cancer originates will be shown. Breast patterns and their composition of nodules, fibers, homogeneous and adipose tissue will be shown in illustrations. The types of breast tumors and where they occur will be shown.

Mammography will be presented as a diagnostic tool that is dependent upon the role of the radiologist, technologist and the resolution of the images produced (equipment).

The role of the technologist is to display the entire breast by positioning and proper use of compression and technical factors. Suggestions on how to improve mammographic images will be shown.

**Generational Diversity in the Workplace**

Victoria Migge, M.S., R.T.(R)(T)

Content is designed to provide managers and clinical staff with the breakdown of the various age groups found in the workplace (these characteristics could also be applied in the classroom for educators) along with their assets and liabilities. The values of each generational group will be discussed including each group's views on authority as well as their management style, reward system, and methods to ensure motivation.

**The Radiological Access Dilemma** Greg Laukhuf, ND, RN-BC, NE-BC, CRN

The Radiological Access Dilemma: What is that? This course addresses basic fundamental principles of vascular access encountered by technologists in every day practice. In addition to a brief history of vascular access in the radiology department, the anatomy and physiology of a vein will be presented. The attendee will also receive a brief review of the common vascular access devices encountered in a radiological setting along with the care, maintenance and troubleshooting of the device based on current guidelines and evidenced based practice.

**Sunday April 22, 2012**

**"IS A TYRANNOSAURUS REX TAKING YOUR X-RAYS?"(Fun Ways to Prepare Children for Medical Procedures)** Dave Whipple, M.Ed., R.T.(R)

When a person enters the medical setting for treatment, it is as much as an emotional stress as physical stress. This is especially true for children whose sense of logic and emotional needs vary according to their developmental level. This talk reviews the concerns of the hospitalized child as it pertains to the four major stages of child development (infant, preschooler, primary education and secondary education) and then shows how you can reduce a child's anxiety for any medical procedure by some very simple methods. This program is excellent for learning how to psychologically prepare children, keeping their anxiety to a minimum, and increasing their cooperation with you as the healthcare professional.

**Imaging of Fetal Anomalies** Cynthia Peterson, M.P.H., R.T.(R), RDMS, RVT

Congenital anomalies constitute a major contributing factor to perinatal and neonatal mortality. This course will review methods of screening and diagnosis of congenital fetal anomalies. The utility of various biochemical and imaging modalities will be discussed. Case studies will be incorporated to illustrate the application of multiple imaging modalities in patient management.

**Pediatric Burn Patients** Mary Mondozi, MSN, RN

This course gives an overview of burn injuries. Burns are injuries to the tissue that can be caused by flame, fluids, heat, chemicals, or the cold. While large burns can be fatal, modern treatment and admission to a Burn Center has significantly improved outcomes for those injured. Burn treatment depends on the severity and size of the injury. These factors and the sequelae that results from this type of injury are explained. Common radiological procedures, an important facet of care for the burn injured patient, are also described.

**Career Advancements in Radiologic Technology** Aimee J. Phillips, M.S.R.T. (R) (M) (CV) (QM)

Career advancement in the radiologic sciences is tricky at best. Many imaging professionals do not realize the options available to them or understand what developing a career path can mean to their success. This program will allow attendees to understand the importance of advancement, where to start, options available, and also challenges and pitfalls they may come across in their endeavor.