OSU RST NEWS

Radiologic Sciences Adopts Zap IT!

Zap IT! was conceived by a group of physicists that value the highest quality service performed with efficiency and accuracy. Driven by a goal to improve accessibility of data and involvement for each facility all while fostering collaboration and benchmarking to improve quality, the team at Zap IT! continues to work around the world with their peers in developing the most comprehensive EQAR® (Electronic Quality Assurance Record) available.

For more information go to: https://zapitmedical.com



Bryon Murray, MS, DABR is a graduate of our Radiography program and has gone on to become quite an entrepreneur having started Ohio Medical Physics Consulting as well as Zap IT!. Bryon is a Certified Radiation Expert in the state of Ohio in diagnostic and radiation therapy and is A.B.R. Certified in Therapeutic Medical Physics. Professional memberships include the American Association of Physicists in Medicine (AAPM) and the American Society of Radiation Oncology (ASTRO).

Bryon has been actively involved in the SHRS Alumni Society and many funding raising events for the School.

His offer to adopt the Radiography, Sonography, and Radiation Therapy programs for utilizing Zap IT! will provide a real world platform for sharing QA data that will hopefully carry them into their professional careers. In all our OSU Radiologic Sciences programs, Quality Control and Quality Assurance are foundational elements. Implementing Zap IT! as a software program and communication tool will allow our students to gain expertise with the many features in the system and leverage those for graduation. Our hope is that upon employment our graduates will not only be highly involved in QC and QA but also share their data through Zap IT! and gain valuable insights from colleagues across the country about equipment performance. Another important feature is the ability to network with a medical physicist for added consultation. This takes QC and QA to a whole new level!

Another great feature within Zap IT! is the continuing education section that allows technologists to earn valuable credits for renewal of their certifications. Providing CE credits and fostering QA data sharing makes this system truly a remarkable tool for the workplace. We hope to give our OSU graduates a valuable "leg up" on the employment market through the utilization of this program within our classrooms. Bryon continues to demonstrate the Woody Hayes moto of paying it forward to his alma mater! For more information on Zap IT!, be sure to visit their website for a complete tutorial.

Radiography Program

waiting for JRCERT site visit!



Allison Stokes, BSRT(R) Program Manager

I have worked very hard with the faculty to prepare our Joint Review Committee on Education in Radiologic Technology (JRCERT) self-study to reaccredit our OSU Radiography program. Many thanks to Ms. Ruth Hackworth who has been a wonderful mentor throughout this entire process. She provided insight on the proper documents to provide and the folks to speak to at the JRCERT. The self-study is a comprehensive narrative and set of documents that completely describes our Radiography program and has been updated given our conversion from guarters to semesters. Over the past few months, the JRCERT sent e-mails to confirm all of our clinical sites listed in the self-study. If you received an e-mail from the JRCERT, thank you for responding! Now that all of our sites have acknowledged the new self-study, we are moving forward with the review of all our materials in the Executive office. Once that is completed, the next step is a site visit by members of the JRCERT. The site visit team will come for a least two days and will split their time between our Atwell offices and out in the clinical sites. This next step will be very important and we will keep those sites selected for a visit informed of the process. Generally, the site visitors like to see the variety of equipment and types of exams that our students get to complete during their clinical rotations.

If you have any questions as this process moves forward, **please do not hesitate to call me at: 614-688-4768.**



CLINICAL INSTRUCTORS ARE BEING CONTACTED BY ARRT TO CONFIRM CLINICAL COMPETENCIES

The text box below illustrates a typical e-mail from ARRT to a clinical instructor. These are no longer a random selection of exams or clinical sites, these will go out to every site for every student. **See below:**

Mrs. Technologist R.T.(R)(M),

JANE DOE, SENIOR STUDENT is applying for Mammography certification and registration from the American Registry of Radiologic Technologists[®] (ARRT[®]). JANE DOE provided your name as her supervisor* and indicated that you could attest to the completion of required clinical procedures by JANE DOE. Please review the procedures listed at the link below, including the procedure names, dates and times performed, and verifying individuals' names. If you are able to confirm that the information appears to be true and accurate, input your signature and click "SIGN."

Review and sign the application

Thank you for your assistance with this process. If you have questions or concerns, please do not hesitate to contact me at (651) 687-0048, ext. 8570.

Sincerely, Teresa (Teri) Vatterott, B.A., R.T. (R)(CV)(CI)(ARRT) Clinical Experience Requirements Coordinator

*The supervisor may be an individual's department manager, clinical coordinator, team supervisor or other individual in a supervisory role.



Ty Fout, MS, RT (R) (MR) MRI Instructor-OSU Faculty

Ty Fout, MS, RT(R) (MR), is now having his MRI students logging all MRI clinical competencies in the ARRT confirmatory system. Given that MRI is now a primary credential, all senior Radiography students specializing in MRI will be able to log their exams as they are completed. This will allow the MRI technologists to recall very clearly the exams completed. All other seniors will have to complete their Radiography credential first before being able to confirm their clinical competencies for CT, Mammo, VIR, etc. We understand that technologists are worried about confirming exams that they don't immediately recall therefore, All OSU RS Seniors will be entering their exams in both E-value and ARRT's clinical competency system. This will allow our Clinical Instructors to be sure they did in fact sign off an exam no matter how long ago the exam was completed. This double entry will have the Clinical Instructor being asked about the same exam in E-value and ultimately ARRT. For more assistance with checking E-value for confirming clinical exams, please call Allison Stokes or Angie Butwin for assistance.

ENERGIZING EDUCATION

OUR LABS ARE BEING RENOVATED FOR MORE QUALITY SIMULATION ACTIVITIES!



As was mentioned in our last issue, our students are all doing more documented simulated examinations within our labs with faculty. To this end, we have been trying to carefully use the Development fund to replace aging equipment and computers in order to make the experience as real-world as possible. The School of Health and Rehabilitation Sciences also has a limited tech fund that has allowed us to do further lab upgrades. The pictures provided are an example of the improved spaces in Atwell for the Radiography energized lab and the Sonography simulation lab.

In the Radiography energized lab, we were able to remove the old film view boxes and

replace them with a **large LCD viewing monitor.** This new digital monitor is attached to a desktop computer and will allow us to view digital images for Radiographic examinations. An added feature is that the large monitor will be wired into our CR reader so we will have additional viewing for our QC lab results and positioning labs that are currently only displayed on a smaller monitor hooked to the system. As seen in the picture above, this has provided us with a larger viewing space and accommodates more active learning in our simulation labs. Some touch up painting and cleaning were completed by Ty Fout and Muler Woldemariam over the winter break to make the space look nice. We are also excited about the removal of our old chalkboard. We now have a **white dry erase board** in the lab so that more diagrams and lists can be made during teaching sessions. The new dry erase board is larger than our previous blackboard so we have more space to write and it is much cleaner.

The sonography lab also acquired a large white board in 243D. This is the first time the lab has had a place to draw and make lists for students. The white board is just an added feature in the new suite that houses three ultrasound units for student simulation. The sonography students are actively using the newly donated Philips IU22 ultrasound system seen in the corner of the picture to the right. Seniors and juniors are actively completing simulated examinations on each other for 25% and 50% competencies outside of clinical rotations. We believe that all our students are gaining valuable simulated experience that allows them to take better advantage or 75% and 100% competencies in the sites, with real patients.



To donate to our labs, please see the last page of this newsletter!



RESEARCH HIGHLIGHTS



Rachel Tatarski, MS, LAT, ATC PhD Candidate & Lab Manager

LABORATORY FOR INVESTIGATORY IMAGING

Midmark Medical is funding and supporting current research on ergonomics in outpatient offices and also automated blood pressure readings.

We are extremely grateful for funding from the Midmark Medical Corporation to conduct product testing of their new outpatient exam table and IQ vitals equipment. Dr. Carolyn Sommerich, Dr. Evans, Dr. Sanders, and Dr. Lavender will be working to product test these ergonomic solutions for the next several months in key outpatient facilities. The hope is that these equipment changes will allow better throughput of patients and also lower the staff's risk for work-related musculoskeletal injures while treating patients.

In our lab, we have an exquisite interest in the IQ vitals equipment. Midmark designed the IQ vitals to provide a reliable digital blood pressure reading (BP) as well as temperature and Body Mass Index (BMI). Given that this equipment will likely replace the manual BP cuffs, height measurement, and other biometrics in the offices, we wanted to know more about its inner workings. Rachel Tatarski, Lab Manager, arranged to have Rayce Robinson – Midmark's Enterprise Specialist come to Atwell to demonstrate IQ

vitals and address our questions about digital BP and how this can work to provide reliable and valid biometrics for patients in our research sites. Rayce demonstrated the equipment as well as provided valuable training information on the correct method for taking a digital BP, based on the John Hopkins and AMA protocol for BP. As a result of the in-service, Midmark gave our lab a complete Midmark IQ vitals system to use for training purposes and research. **Rachel will be supervising an Undergraduate Research project on the reliability and** validity of digital BP vs. automated BP readings.

John P. Mickley is a junior student in the Health Sciences undergraduate program, in the School of Health & Rehabilitation Sciences. John began working in our lab as a

Rehabilitation Sciences. John began working in our lab as a volunteer to log some hours toward his goal of applying to Medical School after graduation. It didn't take long for all of our contributors to notice John and his dedication to research and medicine. John is an honors student at OSU and has been attending the Midmark research meetings that take place each week in Baker Systems. John has toured most of the outpatient research offices and will be working as Dr. Evans' assistant for data collection in two offices. Besides being a great assistant, John has carved out his own research and is the main investigator on the differences between automated and digital BP with IQ vitals. This will be John's undergraduate research thesis. *"Mickley" is a budding MD/PhD!*

Together, Rachel Tatarski and John Mickley will be working to add to our understanding of screening blood pressures!



John P. Mickley Health Sciences/Pre-Med





Mulubrhan Woldemariam (above) & Rachel Pargeon (bottom right) are teaming up to use non-ionizing radiation to assess obesity.

EXCELLENCE IN RESEARCH

The team of Mulubrhan Woldemariam, BA, BS, RDMS, RVT and Rachel Pargeon, BS, RT(R), RDMS are working to gather evidence on the use of gray-scale sonography to gauge visceral fat in the abdomen.

We are very fortunate to have Mulubrhan (Muler) Woldemariam ('16) and Rachel Pargeon ('06,'09) as faculty members and working in the Laboratory for Investigatory Imaging. Muler and Rachel have a shared interest in creating non-ionizing choices for pediatric imaging. Muler has three children and Rachel has two that, on occasion, use the health care system. As parents of young children, they want to promote the use of sonography as the route for diagnosis of their own children and pediatrics at large. It is out of this desire to elevate the imaging choices for children that this research study began.

Dr. Colleen Spees, Assistant Professor in Medical Dietetics, has been funded by the American Dietary Association to investigate methods to reduced childhood obesity and cardiovascular risk. After speaking with Dr. Evans, Colleen offered an article that she had been reviewing about the use of ultrasound to record abdominal adipose. Well, the rest they say is history....as Dr. Evans turned this concept over to Muler and Rachel and they began working to perfect the sonographic scanning technique on faculty volunteers such that they could measure both sub-cutaneous and visceral adipose on a sonogram. Muler and Dr. Evans presented their pilot findings as a poster at the Society of Diagnostic Medical Sonography meeting in the fall and won 2nd prize at the Scientific Poster session. Currently, this poster is being converted into a manuscript for the JDMS. The hope is that this research project will get

some external funding and keep moving

HIGHLIGHTED LABORATORY OUTCOMES

Patterson E.S., Sanders E.B-N, Sommerich C.M., Lavender SA, Li J, <u>Evans</u> <u>K.D.</u> Meeting Patient Expectations during Hospitalization: A Grounded Theoretical Analysis of Patient-Centered Room Elements. HERD. In press.

<u>Volz, K.R., Evans, K.D</u>., Kanner CD, Buford JA, Freimer M, Sommerich CM. 2017. **Targeted Contrast-Enhanced Ultrasound for Inflammation Detection: A Review of Current Evidence.** Published on Online First Sage Publications: http://journals.sagepub.com/doi/ pdf/10.1177/8756479316678616

<u>Volz, K.R., Evans, K.D.</u> Kanner CD, Basso DM. **Exploring Targeted Contrast-Enhanced Ultrasound to Detect Neural Inflammation: An Example of Standard Nomenclature.** Journal of Diagnostic Medical Sonography 2016, Vol. 32(6) 313–323.

LABORATORY FOR INVESTIGATORY IMAGING



To explore our new laboratory website, meet our research staff, view available opportunities, and more please visit us at <u>https://u.osu.edu/evans.36/</u>



EXCELLENCE IN EDUCATION



Sundus Mohammad DMS Class of '17 Rosita Schiller Scholarship for UG research. Nominee for the HRS Award of Merit '17

We are very excited to announce that **Sundus Mohammad is the winner of the Dr. Rosita Schiller scholarship for undergraduate research!** Sundus was funded in early spring semester for her pilot work with Dr. Randee Hunter on image analysis of the tibia. Sundus has been a student in the Division for three years and during that time, she has been actively engaged in a number of research projects. At last, Sundus found a project that is uniquely hers and what an interesting project it isas she is exploring the use of ultrasound to determine the cortical thickness of the tibia in cadavers.

This project began with Sundus and John Mickley helping Rachel Tatarski and Dr. Hunter over the summer. As they assisted the imaging of subjects' lower limbs, it became apparent that there was a huge cache of potential data. Sundus dove into the project and carved out the image analysis of the cortical bone thickness that could be compared on CT scans of the same subjects. Sundus is the Treasurer of the Lambda Nu Honor Society, a senior in the Sonography program, and is now a nominee for the coveted HRS Award of Merit. Sundus is a star student and has recently accepted a job as a Vascular Sonographer with Riverside Methodist Hospital. Sundus also won 3rd place for her research poster at the OSU Denman competition.

Congratulations Sundus!

2016 RSNA TRIP TO CHICAGO

Our annual pilgrimage to the RSNA meeting in Chicago was another huge success! We had a large number of seniors who chose to make the trip with faculty and enjoy the extravagant Exhibit Hall. As is our custom, the seniors had been given a "buying assignment" by their instructors so everyone was jetting around the hall talking with at least 3-4 vendors to make their selection and have enough information to write a two page paper.

It was our good luck to run into a very distinguished OSU RT graduate: Branden Wilson, MPA, RT(R) (CT) [RT-'09]. Branden was at RSNA with his Medical Director trying to buy mammography equipment. Besides having a wonderful reunion with Branden, he made himself available to our mammography students and they went with him to the Hologic booth to participate in the sales demonstration and watch Branden work to buy several units for Kaiser Permanente. Wow! What a wonderful real-world experience and what a terrific role model!!



Branden Wilson RT Class of '09



The students were also treated to an after hours party by the national sales representative for Zap IT!. After the Exhibit Hall closed, our troop went into the Hyatt Regency and had time to network and review the days activities, curtesy of Zap IT!. We are so thankful to Bryon Murray ('89) for throwing the party for our students and allowing us to really relax and talk about all the equipment that we looked at in the Exhibit Hall. It was another successful year in Chicago! We wish our Radiation Therapy seniors equal good luck on their trip in April!

For more information on the annual RSNA meeting in Chicago, see this website: <u>http://www.rsna.org/</u>



UPDATES ON EDUCATIONAL SUCCESS

Brandon Rapp-Radiography-to attend OSRT Leadership Academy! We are very excited to announce that our Brandon Rapp, junior Radiographer, has been chosen by the Ohio Society of Radiologic Technologists for their Leadership Academy. Brandon is a very impressive class leader and was recommended by Dr. Evans for this intensive training. Brandon has demonstrated outstanding writing skills in the RST 3200 course as well as a great test taker in RST 3411. This will be a great asset to Brandon as he leads his class into their senior year and into his own exciting career. *Congratulations Brandon!!*





LAMBDA NU – HONOR SOCIETY FOR THE RADIOLOGIC SCIENCES Lambda Nu (LN) is a national honor society for the radiologic and imaging sciences.

Its objectives are to:

- Foster academic scholarship at the highest academic levels
- Promote research and investigation in the radiologic sciences
- Recognize exemplary scholarship

We are thankful to have Gabriela Lemus as our President of the Alpha chapter of Lambda Nu at OSU. She is being assisted by Sundus Mohammad the LN Treasurer. Together Gabbie and Sundus are working with Dr. Evans to main-

tain the standards of our honor society. This year at our National Radiologic Technology Week celebration, we will inducting additional senior members to LN.

Congratulations to this list of highly qualified honor society nominees:

- Danielle Blaine—Sonography
- Hannah Jones—Radiography
- Paige Tanzer—Sonography
- Randee L. Hunter Faculty

Megan Dyer –Radiography Mollie Arnott– Radiation Therapy L. Tyler Fout, MS, RT(R0(MR) -Faculty

WILL PICKERAL TEACHING ONLINE CT COURSE!



We are so excited to have hired **William "Will" Pickeral, BSRT(R) (CT) into our faculty to run the Computed Tomography online course.** Will is a 2016 graduate of our Radiography program and distinguished himself as an ASRT Leadership Academy graduate in 2015. Will also was the President of our Lambda Nu honor society and a founding member of our Diversity Advisory Group. Will's leadership, scholarship, and terrific personality made him a natural choice to run our online CT course. Will is a new dad! He and his wife welcomed a new baby boy to their family so things are quite busy in the Pickeral household.

Our Will never gets overwhelmed as he is a full-time CT technologist at OSUWMC and also is very much interested in starting a graduate degree. Will Pickeral is an exciting graduate and we are very happy to announce that he has been **accepted to OSU's MBA program.**





Points of Pride for our Radiologic Sciences Programs

- OSU's 2017 Sonographers are 100% pass on the ARDMS physics!
- 94% of Radiography graduates were employed with 6 months of graduation in 2016.
- Four students from the 2016 Radiation Therapy class went on to study Medical Dosimetry to gain advanced certification.

RST DIVERSITY ADVISORY GROUP RECOMMENDS MEDITATION ROOM IN ATWELL!

This is the 2nd year for our Diversity Advisory Group (DAG) which works closely with the Division Director to provide input on issue of diversity as they influence admissions, clinical rotations, classroom activities, etc. Given the challenges of the political climate, the DAG discussed ways that all students in Atwell Hall could find a quiet place to pray, reflect, and/or mediate. After much consideration, the DAG recommended that space be provided off the lobby for students of multiple faiths to have a space for meditation. This initiative was presented by Dr. Evans to the School's Executive Committee. As a result, a **dedicated room was made available on the 2nd floor, for students to meditate and pray.** The DAG went further and suggested furnishings, signage, etc. This initiative has been made an example at the University level! Way to change hearts and minds DAG members!!!!!!!



LOOKING FOR A WAY TO GET INVOLVED?



We invite you to get involved with our students by giving to the Development Fund, guest lecturers, offering a clinical internship, etc. We want to give our students a variety of experiences, so feel free to engage with some of the brightest minds that our professions can offer.

Some clinical preceptors obtain benefits from our programs...it is worth checking out our rewards program. **Renewing football tickets and need to donate??**

<u>Use our fund number:</u> 307893

Contact Dr. Evans at 614-688-4535. We would love to get you involved with our programs.



The Ohio State University

ENERGIZING EDUCATION



Seth Sivard, MS, RT (R) is a Clinical Assistant Professor in our Division and also is the Quality Control Radiographer in the OSUMC Radiology Department. As a Training Coordinator for the OSUMC, he is able to also provide selected training to our students in Atwell and in the Medical Center. Seth is a 1998 graduate of our Radiography program. He is also a 2004 graduate of the Allied Medical MS program. Seth has been employed at The Ohio State University Wexner Medical Center since 1998. He started as a Staff Technologist and quickly earned the position of 3rd shift Charge Technologist. In the summer of 2003, Seth became a Per Diem Technologist at Wexner Medical Center and a full-time imaging

technologist at Camden-Clark Medical Center. From January 2004 – January 2006, he was a Clinical Instructor/Clinical Coordinator in the Radiographic Science Department at the University of Charleston, a Bachelor's of Science program. In January 2006, Seth returned full-time to Wexner Medical Center as the Training Coordinator for the Radiology Department. In June 2008, he was appointed to Clinical Assistant Professor in the Department of Radiologic Sciences and Therapy in the School of Health and Rehabilitation Sciences.

Among his accomplishments, Seth has been voted the Clinical Educator of the Year by the Classes of 2007, 2012, and **2017!!** He was a recipient The Ohio State University Medical Center Preceptor Award in 2008. Seth has also created a presentation on Trauma Radiography approved by the ASRT for a Category A Continuing Education credit.

This year, the <u>OSUMC Radiology Department started a recognition program for those technologists</u> that were recognized by their peers for their quality work. Seth was chosen for the month of January for his work in the main Radiology department. Other winners for that month were: Andrew Gilbert-MRI, Meghan Williams-Sonography, Kelli Morel –CT, Michelle Ervin –PET/CT, Anna Tacoski-Imaging at Martha Morehouse. We are indebted to these outstanding technologists and Seth for demonstrating to our students the value of a great work ethic.

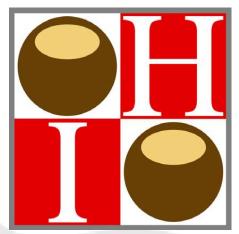
CLINICAL INSTRUCTORS OF THE YEAR

As mentioned in the article above, the senior class votes to award a plaque to those technologists who have been instrumental in their clinical rotations and ultimate competency. For 2017, Seth Sivard, MS, RT(R) was recognized by the senior Radiographers, Sean M. Dugan, BS, RT (R), RDMS, RVT was chosen by the senior Sonography students, and Stefan Hazinakis, BS, RT(T) was chosen by the senior Radiation Therapy students. These distinguished clinical educators were given a plaque and dinner at the senior awards banquet in late April. We highly value our clinical educators who provide context and real world experience to our student each and every day. These technologists are preparing the future workforce and professionals who will make clinical impact!





2017 COUS FALL SEMINAR



SAVE THE DATE SAT., August 19th Seeking 7 SDMS CMEs

Pediatric Sonographic Applications

We are inviting **Kate Zale**, **MS**, **RDMS**, **RVT** back to Ohio State as our keynote speaker. <u>Kate has</u> just authored two textbook chapters on pediatric sonography for Sandy Hagen-Ansert. Our topics:



Kate Zale –Vascular sonography in pediatrics,

Abdominal sonography optimization in pediatrics, and handson scanning sessions.

- Rachel Pargeon Strategies for calming the pediatric patient.
- Rachel Tatarski Sonography of high ankle sprains in High School athletes.
- Allison Stokes How to interpret a pediatric CT scan.
- Mulubrhan Woldemariam and Dr. Evans Sonographic measurements of pediatric adipose to gauge cardiovascular risk.
- Cindi Petersen CEUS dosing for pediatric patients.

Food provided for all participants; Parking in OSU Visitor Garage at your cost.

E-mail: CentralOhioUS@gmail.com to reserve your seat!