

February 2, 2016

**Director's Corner** 

Interprofessional Education - CV Module

**Radiology Simulations** 

**Nurse Anesthesia Simulations** 

HeartCode© Is Coming

**OIPS Team Member Highlight** 

**Anesthesia Resident Simulations** 

Interprofessional Psychiatry Simulations

International Meeting on Simulation in Healthcare



#### **Director's Corner**

Marjorie Lee White, MD, MPPM, MA

January was another busy month for the OIPS team. We continue to offer high quality interprofessional simulation experiences for learners at all levels from pre-clinical students to practicing clinicians. We also focused on our own professional development by attending the International Meeting for Simulation in Healthcare in San

# Interprofessional Education - CV Module

Silvio Litovsky, MD and Harish Dopplapudi, MD

Another successful interporofessional simulation event was held on January 25th and 26th in the Volker Hall Simulation Sandbox. The cardiovascular session involved over 200 medical



and nursing students. The cases focused on communication and

Diego. At this meeting we were proud to support our own Chad Epps as he assumed the presidency of our simulation community's most prestigious organization. In addition, our team contributed to the development of simulation expertise by presenting posters, workshops and round tables, and engaging in spirited debate at other sessions.

Our team has accomplished much with your help. Details of our past year are available in our annual report which is posted here.

Please don't hesitate to contact me if you have any questions about how you can use simulation to change the way healthcare students learn and practitioners train.

Marjorie Lee <a href="mlwhite@uab.edu">mlwhite@uab.edu</a>

interprofessional management of acute arrhythmias.

The feedback received from the students was outstanding. Over 99% of the students strongly felt that the simulation event was a very positive event, with many students commenting on the importance of communication and working together as a team. A common theme was related to the importance of sharing information between nurses and doctors and working together for the benefit of the patient. One medical student noted, "nurses are critical to the overall wellness of the patient." The students enjoyed rehearsing the conditions that might lead to life threatening arrhythmias, their proper diagnosis and treatment, including cardioversion and defibrillation. Learning how to use the defibrillator was a learning experience they felt was critical to their medical training.

The event would not have been possible without the help of faculty from the School of Nursing, Division of Cardiology, Emergency Medicine, Pathology, and several fourth year medical students. We'd like to say special thanks to Todd Peterson, Chris Greene, Chris Roth, Silvio Litovsky, Harish Doppalapudi, Carmel McNicholas-Bevensee, Joanna Joly, Samuel McElwee Penni Watts, Summer Langston, Kelly Dailey, Nanci Swan, Mike Hyde, Tim Holloway, Jabril Cooper, Jarrod Young, Finn Perkins, Tyler Burks, Cyrus Massouleh, Chad Colon, Andrew Smith, Divya Carrigan, Robyn Wilson, Julianne Burke and everyone else who contributed for your help. This was a successful event the students will remember for a long time to come.

## **Radiology Simulations**

April Belle, MSN, RN & Chad Epps, MD



The Office of Interprofessional Simulation (OIPS) and the UAB Department of Radiology are collaborating to simulate low-occurring, high risk patient events. This department identified an opportunity to provide interprofessional simulations for its faculty and staff. The goal of these simulations is to prepare physicians, radiology technicians, and nurses for rare events such as bronchospasm, laryngeal edema, hypertensive crisis, anaphylaxis, and seizures that could occur during radiologic diagnostic testing.

Drs. Jubal Watts and Matthew Larrison recently hosted the inaugural event. This session consisted of attending radiology physicians and radiology technicians working together to care for their patients. These participants reviewed the signs and symptoms of various emergencies, discussed and implemented appropriate treatments, and demonstrated strategies for improving teamwork and

communication skills.

Simulation is an educational technique that provides an opportunity for improving the way teams perform. Our patients rely on healthcare teams to perform optimally in emergent and non-emergent situations. Interprofessional simulation is one way to improve the delivery of care and meet the needs of our patients. The partnership between the UAB Department of Radiology and OIPS is wonderful example of collaboration for the benefit of our patients.

#### **Nurse Anesthesia Simulations**

Susan McMullan, PhD, MSN, CRNA & Elizabeth Laura Wright, PhD, MNA, CRNA

The UAB Nurse Anesthesia Program is a didactically-front-loaded program. This means students learn all of their information up front before spending time in the operating room. The UAB Nurse Anesthesia faculty has worked diligently to put together programs of simulation for our junior students whereby they can practice the elements of an anesthetic in a "safe" environment. Their recent "Induction Simulation" was designed to introduce them to an operating room setting in a safe, non-stressful manner. The students



work in small groups to become familiar with the flow and sequence for the induction of general anesthesia. This simulation provides them hands-on experience with the anesthesia machine, dosing common medications, and the opportunity to practice basic airway skills. Induction scenarios vary and have particular objectives that help students develop and apply critical thinking skills. The students are debriefed so they can evaluate their own performance. Problem-solving as a group is encouraged, which always leads to excellent questions and discussions. Student response to the experience is overwhelmingly positive. They appreciate the opportunity to participate in hands-on simulation and instructors get to see the excitement in their eyes as light bulbs suddenly turn on as they work through a scenario.

HeartCode© is Coming

India Alford, MSN, RN NE-BC



With the increase in simulation in education, have you ever wondered why Advanced Cardiac Life Support (ACLS) and Basic Life Support (BLS) classes do not have simulation components? Well the wait and wonder is over. Starting this month, University Hospital will begin a transition to HeartCode® ACLS and BLS classes.

What is HeartCode©? HeartCode© is a comprehensive elearning program from the American Heart Association

(AHA). These courses have computer based modules that the learner will complete through UAB Faculty & Staff Learning System (powered by HealthStream). Once the student has achieved success in the computer based module, then he/she will complete a simulation on one of the new voice-assisted manikins (VAMS). This program is being utilized in many hospitals as the new standard for ACLS and BLS classes. The voice-assisted manikins are able to measure compressions to 1/16th of an inch- providing voice feedback for the student as they progress.

Why the desire for change? As an organization, we strive for excellence in patient care which begins with us all as care providers. Finding ways to standardize training and measure its effectiveness among all of the care team can often be a challenge. HeartCode© provides us a way to standardize BLS and ACLS training for everyone. This course allows for standardization of competency, not just certification, allows for self-directed, self-paced one-on-one learning and most importantly- this program helps improve end outcomes. For more information, please contact India Alford, <a href="mailto:idlford@uabmc.edu">idlford@uabmc.edu</a>

### **OIPS Team Member Highlight - Student Workers**

Jarrod Young, Clinical Simulation Specialist

We could not provide the UAB enterprise with simulation without our dedicated employees. One of the most important positions within the Office of Interprofessional Simulation is the student worker. Unlike many positions offered to UAB students, we pride ourselves on truly bringing our students on-board as an equal team member. When hiring, we look for the best that UAB has to offer. Many of our student workers have a specific expertise or interest that mutually benefits their growth in the work force



and our needs as an office. Currently, OIPS is staffing seven student workers of differing backgrounds. Our longest tenured student employee is Kathryn Skelton, who is a junior majoring in Sociology and minoring in Chemistry and Biology. Kathryn plans to attend professional school to become a Physician Assistant and work in rural medicine. James Nunally, who has been with us since May of 2015, is a recent graduate who holds a Bachelor's of Science in Chemistry and is currently pursuing his minor in Biology. James is hoping to attend Pharmacy School in the near future. Joey Travis, who has also been with us since May of 2015, is in his final semester of Nursing School. Upon graduation, Joey plans to begin working at UAB and has aspirations of going back to school to become a Nurse Practitioner. Ambiir Gray, who began working with us since August of 2015, is a senior majoring in Public Health and African-American Studies. Ambiir plans to get her Master's in Public Health and then attend Medical school to work in Pediatrics. Toney Hicks, who also began in August of 2015, is a junior majoring in Electrical Engineering and minoring in Spanish. Toney plans to

work as an engineer once he is done with school. Our two newest employees are Teldra McCord and Danny Do, who both begin working with us in January of 2016. Teldra is a senior majoring in Biomedical Engineering with a Chemistry minor and plans to work as an engineer before attending medical school. Danny is a junior majoring in Information Systems who wants to pursue his Master's degree. We are also proud to have two alumni student workers. Both Deidra Atkinson and Brad Bertke have graduated from UAB and have since moved on to working in the Healthcare Industry. Deidra, who graduated with a Bachelor's in Biomedical Engineering, is currently working as a Medical Scribe in the Emergency Department at St. Vincent's Hospital. Brad, who graduated with a Bachelor's in Healthcare Management, is currently working as an Equipment Technician with OIPS. Brad is using his degree in Healthcare Management to help assist our Program Director with administrative tasks, as well as assisting with the operations side of simulation from his experiences as a student worker. Without this group of individuals, we would not be able to provide the UAB enterprise with the quality and quantity of simulations that we currently offer.

#### **Anesthesia Resident Simulations**

Erin Blanchard, BSN, RN, CPAN



During their three years of residency, anesthesia residents have the opportunity to participate in two high fidelity, immersive simulation sessions each year. The simulations, held on the third floor in the Quarterback Tower Simulation Lab, offer challenging scenarios that range from induction to postoperative care. The residents are able to work together to determine the best treatment plan for any given situation in addition to practicing leadership and crisis resource management strategies.

In addition to anesthesia residents, nurse anesthetist students will also be participating in many of the simulated cases. The two types of anesthesia providers will partake in interprofessional scenarios that aim to mimic the providers' interactions in the operating room, with the goal being improved interprofessional communication and collaboration. The hope is to expand the interprofessional aspect of anesthesia simulations to include other professions in future.

## **Interprofessional Psychiatry Simulations**

Laurel Hitchcock, PhD & Taylor Preston, MD

The Department of Social Work in the College of Arts and Sciences and the Department of Psychiatry in the School of Medicine have recently partnered to design and implement unique simulation cases to meet the learning needs of pre-professional students studying social work and medicine at UAB. Because social work students are undergraduates at UAB and the medical students are considered professional graduate students, they rarely have opportunities to interact together as

learners, even though social workers and psychiatrists make up the majority of mental health professionals in the United States. Dr. Laurel Hitchcock (Social Work) and Dr. Taylor Preston (Psychiatry) have found that they can meet the needs of students from very different educational programs with simulations that focus on collaboration, debriefing, and feedback. Their work began with planning simulations that focused on the common learning goals of both professions (i.e. how do health professionals recognize the signs of elder abuse?) and teamwork, rather than the specific learning needs of a medical or social work student. Next, they collaborated with OIPS to train individuals who would be the simulated patients for their cases. Drs. Hitchcock and Preston were able to coach the simulated patients to understand not only the needs of each case, but also to understand how each profession would approach the patient. They also model collaboration and teamwork by actively participating in the debriefing process with students, taking turns leading, and making an effort to address student questions from each professional perspective.

## International Meeting on Simulation in Healthcare

Chad Epps, MD



The 16<sup>th</sup> Annual International Meeting on Simulation in Healthcare (IMSH) was held in San Diego, January 16-20, 2016. This is the world's largest gathering of healthcare simulation professionals with over 3600 attendees representing every health profession, military, government, human factors, and industry. IMSH is the annual meeting for the Society for Simulation in Healthcare (SSH), a non-profit

membership society committed to furthering and supporting the science of healthcare simulation. SSH supports educators, healthcare providers, researchers, administrators, curriculum developers, technologists, and policy makers with staying up to date on developments in the rapidly changing world of simulation-based education in healthcare.

This year's innovative IMSH programming included an opening IGNITE! Session featuring six dynamic, inspirational stories of impact from within and from outside healthcare simulation. On day 2, Allison Levine, team captain of the first American Women's Everest Expedition, offered insight on creating cohesive teams, taking responsible risks, and developing no-nonsense leaders. Day 3 featured Matt Weinstein, bestselling author of "Managing to Have Fun," offering ideas on managing your world through fun and play. On day 4, the closing plenary highlighted a different type of simulation with Kim Binstead, a NASA simulation specialist, sharing the habitat, research, and team dynamics she's experienced while facilitating long-duration simulated Mars missions.

In addition to the plenary sessions, there were <u>over 300 educational sessions and workshops</u>. Many of these sessions and workshops were facilitated by UAB faculty. UAB had a strong presence with more than 20 attendees from both UAB and Children's of Alabama. UAB faculty led five workshops, two podium presentations, one panel discussion and had a total of five poster abstracts accepted. Chad Epps was inducted as President of SSH and Marjorie Lee White continues to chair the Pediatric Section of SSH. UAB attendees will be sharing their experiences and lessons learned with each other and those that were not able to attend.

The IMSH exhibit hall was described as a "Disneyland for sim geeks." Over 100 exhibitors presented the latest in healthcare simulation products, technology, and innovation. The latest advances in virtual

and augmented reality were highlighted as well as the most recent technologies in surgical simulation. The <u>CUT suit</u> was a highlight - a wearable part task trainer for trauma - which is a product currently available to the UAB community through the Office of Interprofessional Simulation (OIPS). On Friday, Jan 29, OIPS facilitated an on-campus opportunity for UAB attendees to share their IMSH experiences and lessons learned with each other and the rest of the UAB simulation community. The meeting was a huge success and we're already looking forward to next year's IMSH in Orlando, Florida, January 28 - February 1, 2017.

#### **Upcoming Events**

February 4, 2016 <u>Sim 2</u>

February 16, 2016 Advanced Debriefing

February 18, 2016 <u>SimConnect</u>

February 28, 2016 Quality Academy

For more Facilitator Development Opportunities visit <a href="https://www.uab.edu/simulation/development-opportunities">https://www.uab.edu/simulation/development-opportunities</a>



Top Rows (left to right):Tyler Burks (Clinical Simulation Specialist), Jarrod Young (Clinical Simulation Specialist), Betty Farley (Program Director III), Tim Holloway (Faculty Educator), Marjorie Lee White (Director), Brian Mezzell (Program Administrator II), Erin Blanchard (Simulation Educator Senior), Chad Epps (Associate Director), Kelly Markham (Administrative Associate), David Mathews (Clinical Simulation Equipment Technician),

Seated (left to right): April Belle (Simulation Coordinator Senior), Lisa Bagby (Simulation Coordinator Senior), Dawn Taylor Peterson (Director, Faculty Development & Training), Jabril Cooper (Clinical Simulation Specialist), Charlie Prince (Program Director II)

For more information, please visit us on the web at <a href="http://www.uab.edu/simulation">http://www.uab.edu/simulation</a>

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