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### **Director's Corner**

Marjorie Lee White, MD, MPPM, MA

July is always an exciting month for simulation. Within the hospital, new residents start new years. OIPS is thrilled to have become part of the culture for new trainees. This year, residents will check off their BLS skills in the Heartcode area (in partnership

## Intensive Care Unit Interprofessional Education Simulations

Michelle Brown, MS, MLS(ASCP)SB & Penni Watts, PhD, RN

with GME and the CNE), participate in interprofessional code training and do baseline central venous line training. New fellows have also been taking advantage of the trainers housed in our procedural area.

It's also the month we do ICU IPE – when we turn Quarterback Tower back into the medical intensive care unit it was – see story & photos! The interprofessional lessons learned will translate into improved patient care.





Intensive care units are often busy and chaotic. The diversity of the team members and the acuity of the patients in the ICU require that teamwork and communication are efficient and effective. Novice healthcare providers and students from seven professions were able to practice these skills in an ICU interprofessional simulation July 27 and 28. The professions participating include medicine residents and students in physician assistant studies, clinical laboratory science, accelerated masters in nursing pathway, physical therapy, respiratory therapy, and nuclear medicine technology. This simulation included 144 learners, 36 facilitators, and 19 volunteers. Read more...

See photos from the simulations

# **Shock Week Simulations**

**Ryan Kraemer, MD** 

The UAB Internal Medicine Residency program held its 6th annual code week from Monday, July 10 to Thursday, July 13. Code week is designed to give the second year internal medicine residents the tools they need to successfully lead codes at UAB. In addition, it helps teach participating nurses, respiratory therapists, and pharmacy students valuable ACLS and teamwork/communication skills. The Office of Interprofessional Simulation for Innovative Clinical Practice coordinated the program, which included 38 internal medicine residents, 29 nurses, 8 respiratory therapists, and 8 pharmacy students.



After a brief introduction, the participants were divided into a group which included several MDs, several nurses, a respiratory therapist, and a pharmacy student. The code blue alert then sounded, and participants had to rush to the bedside to begin the code. Using the high-fidelity mannequins, the OIPS team simulated a realistic code scenario. The code team had to assess the patient and work together to provide proper ACLS care. After the first case, each team debriefed with a faculty member and ACLS/simulation expert. We focused on teaching proper communication, establishment of roles, and proper ACLS team function in addition to ACLS algorithm knowledge. Each team then had the opportunity to practice their skills through Rapid Cycle Deliberate Practice (RCDP) in a second case. With RCDP, the faculty member and OIPS team periodically interrupted the case to provide brief teaching points and then let the team resume the case and practice.

Comments from the participants were overwhelmingly positive with many commenting how much more effective the code was after practicing closed loop communication and defined roles. The rapid cycle deliberate practice session was a favorite of the group.

This was a large effort to pull off successfully and a big thanks is owed to Andres Viles, April Belle, Lisa Bagby, Jason Morris, Winter Williams, and the OIPS team!

### **SHPEP Simulations**

Marquita Hicks, MD



On July 5 and 6, the UAB Summer Health Professions Education Program (SHPEP) partnered with OIPS to hold a simulation experience at the Volker Hall Sandbox. The simulation consisted of 73 learners with interests in medicine, dentistry, optometry and physician assistant careers. Participants utilized the high-fidelity mannequins to gain exposure to the basics of simulation and learning to work together in an interprofessional environment. Learners participated in simulations to learn how to manage acute anaphylaxis reactions and seizures in a non-healthcare setting. Following debriefing, the learners were presented with a mini-lecture to highlight the basic

science behind the scenario. Highlights and common themes included gaining experience in the scenarios, learning how to use an epi pen, and being able to debrief and discuss the simulations.

Thanks to Dr. Chrystal Rutledge and Dr. Carmel McNicholas-Bevensee, who facilitated the sessions, Mr. Ben Whitaker, from OIPS, who helped set up and provided technical support throughout the simulations, and Mr. David Matthews for logistical support.

### **Code Stroke Simulations**

Jessica Ellison, BSN, RN, Stroke Program Coordinator

On July 17 and 18, the UAB Stroke and Neurovascular Center partnered with OIPS to hold a simulation experience in Quarterback Tower sim lab. The simulations consisted of approximately 10 learners from the Department of Neurology, the Emergency Department, and Pharmacy. Participants utilized the Alteplase simulation vials, IV insertion sites, and video recording in order to be able to complete a NIH Stroke Scale, obtain pertinent patient history in a timely manner, demonstrate effective communication between team members, identify code stroke time metric goals, and



identify candidates for thrombolysis and intra-arterial recanalization. Highlights and common themes of the experience included learning how to communicate to various disciplines to provide and expedite patient care and learning how to assign team roles and tasks. Thanks to OIPS, our teams were able to learn how to effectively communicate and improve practices to provide the excellent, timely patient care that our stroke patients need.

## **Anesthesia Resident Boot Camp**

Erin Blanchard, MSN, RN

On July 12 and 14, the Department of Anesthesiology and Perioperative Medicine Simulation Program partnered with OIPS to offer the CA-1 boot camp for anesthesiology residents entering their second year of residency. The two day event saw a total of 20 residents go through simulation sessions on ultrasound guided internal jugular central venous line insertion, peripheral venous catheter insertion, and general anesthesia inductions. Learners also had didactic sessions on anesthesia machine checkout, setting up for cases, and the Emergency Activation System. Finally, the residents were able to go to North Pavilion where they were given overviews of the sterile core, ordering labs, Omnicell basics, and various supplies in the anesthesia lab.



Learners appreciated the boot camp, with some learners stating the course was "excellent," made them feel "more comfortable going into the OR," and they liked the "hands-on clinical application." Next year's boot camp is already scheduled for July 12 & 13, 2018, with plans in place to expand the simulation component.

### Dean of the School of Medicine at Chung Shan Medical University Tours OIPS Simulation Labs

Marjorie Lee White, MD, MPPM, MA

OIPS is occasionally asked to host tours for VIPs who are visiting UAB and are interested in our interprofessional simulation program. Dr. Ming Tsai is Professor and Dean of the Chung Shan Medical University School of Medicine in Taiwan. The University of Alabama School of Medicine has an affiliation with Chung Shan Medical University. Members of the UA School of Medicine leadership met with Dr. Tsai as he shared some of the curricular changes that they have made based on UAB's model. In follow-up correspondence, Dr. Tsai indicated that his faculty is interested in modeling their interprofessional simulation activity on the model developed here at UAB.



## **Pulmonary/Critical Care Procedural Training**

David Campbell, MD



Throughout the month of July, the Division of Pulmonary, Allergy, & Critical Care Medicine partnered with OIPS to hold multiple simulation experiences across multiple procedures and disciplines. The simulations consisted of five to six learners from the first year Pulmonary/CCM fellows. Participants utilized the Central Line, Intubation, and Bronchoscopy simulators in order to not only gain more skill and exposure to those procedures, but also to learn how to supervise new interns in a standardized and systematic way. The goal of this focus on "training the trainer" is to help standardize practice across providers of multiple skill levels and help prevent complications and

morbidity down the road. Highlights of the simulation include not only skill building, but also an enhanced sense of camaraderie as the new group of fellows get to know each other and explore new skills together. Thanks to Lisa Bagby and all the OIPS staff who were so easy to work with and flexible in helping us utilize the excellent resources that are available.

# **TECH UPDATE: New SonoSite Ultrasound**

Amanda Gargus, Clinical Simulation Specialist

The more we learn about clinical ultrasound, the more we agree with the growing body of literature that indicates ultrasound is underutilized. In fact, we believe along with the American Institute of Ultrasound in Medicine (AIUM) that, in many scenarios, it should be the first and only tool necessary

to aid in diagnosis or guide an invasive procedure.

Many clinicians are unaware of the range of conditions for which ultrasound first is an established guideline, and the gap only grows larger as research extends ultrasound's diagnostic value.

Point-of-care ultrasound is helping reduce hospital and patient expenses by reducing cost to the health system and the time required for diagnosis and treatment.

The implementation of point-of-care ultrasound technology enables medical professionals to perform precision-based procedures and treatments under direct ultrasound visualization. A growing number of studies indicate that use of ultrasound guidance by physicians may improve success and decrease complications in central line placements, peripheral vascular access, regional anesthesia (nerve blocks), lumbar puncture,



biopsies, thoracentesis, paracentesis, arthrocentesis, incision and drainage of abscesses, and localization and removal of foreign bodies.

Whether you're a novice or expert in your use of point-of-care ultrasound, the SonoSite ultrasound will improve your knowledge of today's ultrasound best practices. For inquires about ultrasound procedural simulation, email <u>simulation@uab.edu</u>.

# International Pediatric Simulation Symposia & Workshops

Marjorie Lee White, MD, MPPM, MA



As a member of the pediatric simulation community, I was fortunate to be able to attend the 9th International Pediatric Simulation Symposia and Workshop. The International Pediatric Simulation Society developed this venue to share important pediatric-related simulation updates with the international pediatric community. Plenaries included focus on leadership, patient safety and human factors. A highlight was a tour of Boston Children's amazing simulation facilities.

## **Annual SimOps Conference**

**Brad Bertke** 

This year's SimOps conference was held at Michigan State University on July 27 and 28. Simulation operation specialists, educators, and technical professionals from all over the country gathered to share their knowledge of the operational side of simulation. The conference offered four different session types: technical operations, administrative operations, professional development, and educational technologies. Hollywood special effects master Tony Gardner kicked off the conference by sharing his experiences in working on projects such as



Michael Jackson's "Thriller" music video, 127 Hours, and Shallow Hal. All of the large simulation vendors attended to show off their latest products, including 7-Sigma's new airway trainer and Laerdal's new abdominal exam trainer. Augmented reality and virtual reality were popular topics this year, and several discussions were had about the pros/cons of each. I was able to attend sessions that discussed how to implement and manage an inventory process for a simulation center, how to use simulation to deliver a TeamSTEPPS curriculum, virtual patient simulation, developing a mobile

simulation program, and more. I found this conference to be a very beneficial opportunity for simulation operation professionals to network and share their ideas. Since medical simulation is often considered to be in its "pioneer" stage, it is important for gatherings such as SimOps to exist in order to share best practices in the field.

## **OIPS Team Member Highlight - Shelby May**



Shelby May recently joined the Office of Interprofessional Simulation for Innovative Clinical Practice as a Clinical Simulation Equipment Technician. She was born in Milford, Delaware but now lives in Birmingham. Shelby is a graduate of UAB, where she earned her Biomedical Engineering degree. She has three years of hospital experience in process improvement and developing action plans for the operations of support services departments. Shelby is the mother of a happy, one-eyed dog named Griffin. Her interests include: spending time with her boyfriend, cooking, rock climbing, reading, writing poetry, and adventuring outdoors. Shelby's favorite

food is chocolate lava cake with vanilla ice cream. The last book she read was "Never Let Me Go" by Kazua Ishiguro. She is currently reading "Between the World and Me" by Ta-Nehisi Coates, and she is a big fan of podcasts with her favorite ongoing podcast being the Phileas Club. Her next vacation will be to Navarre, Florida.

### **Research Congratulations**

Congratulations to Dr. Steve Mitchell and his team of investigators for securing the Predoctoral Pediatric Training in General Dentistry and Dental Hygiene. This project aims to develop compassionate and competent dental care providers. Co-investigators include Carly McKenzie, Aymee Anderson, Cecilia Cheon, Wesley Wright, Conan Davis, John Thorton, and Stuart Lockwood.

### **Upcoming Conferences**

#### SSH/INACSL Regional Workshop

The UAB Simulation Corsortium is providing a location for a Society for Simulation in Healthcare (SSH) and International Nursing Association for Clinical Simulation and Learning (INACSL) Regional Workshop on September 23, 2017 at the Children's of Alabama Bradley Lecture Center. For more details and registration information please <u>click here</u>.

### 2017 AlaSim International Conference and Exposition

The AlaSim International Conference and Exposition will be held in Huntsville, Alabama on October 25, 2017. The call for electronic one page abstracts is due on August 19, 2017 for those interested in presenting at the conference. For more details and registration information please <u>click here</u>.

### Important Dates for Simulation Community and/or Facilitator Development

August 8, 2017

ESP Workshop

August 21, 2017

SimShare

August 30, 2017	<u>SimConnect</u>
September 11-15, 2017	Healthcare Simulation Week
September 14, 2017	<u>Sim 1</u>
September 21, 2017	DASH© Series 5
September 26, 2017	Advanced Debriefing
September 28, 2017	<u>Sim 2</u>

For Facilitator Development Opportunities visit https://www.uab.edu/simulation/development-opportunities



Top Rows (left to right): Andres Viles (Simulation Coordinator Senior), Brandon Smith (Clinical Simulation Specialist), Lisa Bagby (Director of Procedural Simulations), Ben Whitaker (Clinical Simulation Specialist), April Belle (Director of In Situ Simulations), Kelly Markham (Administrative Associate), Betty Farley (Program Director III), Brian Mezzell (Program Administrator II), Brad Bertke (Program Coordinator I), David Mathews (Clinical Simulation Equipment Technician), Erin Blanchard (Simulation Educator Senior), Marjorie Lee White (Director)

Seated (left to right): Tyler Burks (Manager - Clinical Simulation Operations - Audio Visual), Amanda Gargus (Clinical Simulation Specialist), Shilpa Register (Director of Research), Dawn Taylor Peterson (Director, Faculty Development & Training), Charlie Prince (Director of Operations)

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



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