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OIPS Team Member Highlight



Director's Corner

Marjorie Lee White, MD, MPPM,
MA

July marks the beginning of a new year
in an Academic Health Center and is a
traditional busy one for the simulation

Code Week

Ryan Kraemer, MD

community.

This year, OIPS was involved in the first centralized central venous line procedural simulation. I'm delighted to report that we partnered with over 25 faculty and fellows from multiple departments so that our trainees can truly say that they've seen one, simulated some and share the goal of harming none.

Our immersive simulation program continues to expand both at the Volker Hall Simulation Sandbox and Quarterback Tower. We've had lots of summer program activity that focuses on establishing interprofessional connections.

Our in situ simulation program has also expanded into new areas as individuals in the health system reach out to OIPS for help in understanding our systems integration.

The OIPS team continues to expand. Please see the profile of our newest simulation specialist, Brandon Smith.

The UAB Internal Medicine Residency program held its 5th annual code week from Monday, July 11 to Thursday, July 14. Code week is designed to give the second year internal medicine residents the tools they need to successfully run codes at UAB. In addition, it helps teach participating nurses, respiratory therapists, and pharmacy students valuable ACLS skills. The Office of Interprofessional Simulation coordinated the program which included 38 internal medicine residents, 18 nurses, 8 respiratory therapists and 8 pharmacy students.



After a brief introduction, the participants were divided into a group that included several MDs, several nurses, an RT 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.

After the first case, each team 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 suspended 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 asking "Can we please do this more often?!"

Announcements

Congratulations to Dr. Marjorie Lee White, who has been selected for one of the 2016-2017 School of Medicine Dean's Research Awards for the project entitled "Development of Interprofessional Education Communication Videos."

Intensive Care Unit Interprofessional Education

Penni Watts, PhD, RN



Caring for patients in an intensive care unit presents many challenges, including handling critical incidents in a busy and chaotic place. Novice healthcare team members often have few opportunities to independently manage the urgency of these situations. The ICU Interprofessional Simulation experience was designed to provide upcoming healthcare team members exposure to complex patient situations. Five healthcare professions and students came together to participate in the simulation. Professions participating included medicine residents and interns, physician assistant students, laboratory science students, AMNP nursing

students, and physical therapy students with practicing respiratory therapists and nuclear medicine technologists participating as well. The total number of learners for this event was 158.

Within the simulated ICU, patients suffered from complex diagnoses needing resuscitation and high levels of intervention by the healthcare team. Three standardized patients and 4 high fidelity simulators were used. A unique aspect to this simulation was the inclusion of the clinical laboratory. Two laboratories were used for this ICU simulation. The ICU setting contained a stat lab where simulated specimens were analyzed and blood products were issued to nursing staff. A large lab where real blood and body fluid specimens were analyzed, was housed at the School of Health Professions Clinical Laboratory Science student lab. The progression of the scenarios was in part dependent on the results the laboratory students produced.

Each profession entered the simulation after receiving their respective checkouts and entered the simulation to care for patients. Strategic scripting of each patient case included intentional interactions between the different professions. After the simulation, debriefings were conducted in three stages. Immediately post simulation, learners received a quick post case debriefing in each individual patient room. A large group debriefing was then held with all disciplines for 45 minutes focusing on communication, teamwork, and resource management. Individual profession debriefs were conducted at the end of the entire experience to discuss any specific profession questions.

Learners commented: "Learning the roles of other professions...I never knew what many of them did." "Being able to make independent decisions was valuable." "Teamwork is essential in providing the best patient care." The ICU IP Simulation Experience is one of the largest events of its kind, and its mission is to emphasize to learners the importance of communication and collaborating together as a team to provide the highest quality patient care.

UAB Simulation Fellowship

Dawn Taylor Peterson, PhD

OIPS is pleased to announce a new simulation fellowship for physicians who are board-eligible/board-certified in Anesthesiology, Emergency Medicine, and/or Pediatric Emergency Medicine. The UAB simulation fellow will serve in a hybrid clinician / educator / researcher position. The position is offered through OIPS in collaboration with UAB Health System. [Read more...](#)

For more information, visit <https://www.uab.edu/simulation/scholarship/uab-simulation-fellowship>



UAB Medicine Central Line Training

Lisa Bagby MSN, RN, CEN & Marjorie Lee White, MD, MPPM, MA



As part of a focused effort to improve our care of patients with central lines, OIPS has partnered to develop a comprehensive approach to CVL training. This approach includes a CVL learner module that is available in the UAB Learning System and in Canvas, a simulation instructor training course and a clinical supervisor training course. These resources were developed in partnership with the UAB Medicine CVL Training Task Force. To access these resources, please see <http://www.uab.edu/simulation/for-learners/other-videos>.

Other resources for CVL include the CVL training checklist and the CVL checklist for use in the

PRIME Students Engage in Interprofessional Simulation

**Carmel M. McNicholas-Bevensee, PhD (PRIME Program Director) and
Chrystal A. Rutledge, MD (PRIME Simulation Co-Director)**

The fourth year of PRIME (Pre-Matriculation in Medical Education) recently completed enabling another group of incoming medical students an introduction to interprofessional simulation. PRIME, a four week program, is made possible due to a HRSA grant administered through the School of Medicine's Office of Diversity and Multicultural Affairs in collaboration with the Office of Undergraduate Medical Education and the School of Nursing. Staffing was provided by OIPS led by Brandon Smith. Kelly Dailey, MSN RN participated from the School of Nursing. Simulation sessions reinforced material taught in lecture and



were designed to enhance communication between medical and nursing student groups. Debriefing followed a similar format to simulation sessions in the regular school year but also incorporated a short mini-lecture combining the clinical concepts of the simulation session with the background physiology and pathophysiology. A combination of manikin, standardized patient and embedded participants provided an opportunity to gain experience on obtaining patient history, physical diagnosis, and treatment plans. Rapid cycle deliberate practice to reinforce basic life support training was enhanced by the opportunity to visit the Children's of Alabama simulation center and utilize both pediatric and adult trainers. Basic IV skill training was organized by Bonnie S. Bibb, MSN RN with assistance from Summer Langston, DNP and senior nursing students. Senior medical students Chandler Stisher, Latrice Johnson (both past PRIME participants) and Adrienne Wiggins also participated.

Bootcamp for Anesthesia CA-1s a Success

Erin Blanchard, MSN, RN, CPAN



On July 18 & 19, a bootcamp was held for all 21 CA-1 anesthesia residents. For the second year in a row, CA-1 anesthesia residents gathered to gain critical knowledge essential to their daily practice. Drs. Jeff Simmons and Tekuila Carter presented lectures with topics including Anesthesia Machine Checkout, OR Vigilance, and Daily Case Preparation. The residents also had the opportunity to get their first exposure to the simulated OR in Quarterback Towers, including getting practice with simulated inductions and intraoperative problem solving.

This year was the first time the bootcamp included central venous line training, facilitated by Dr. Nicole McCoy. Each resident was able to do procedural training on CVL task trainers and place ultrasound guided central venous lines. This training was included into the bootcamp as part of UAB's effort to improve quality and safety to patients who receive central lines. The goal of the training is to assist learners in meeting a minimum safety standard prior to engaging in supervised insertion of central lines on patients.

Summer Health Enrichment Program

Marquita Hicks, MD

On July 13 in the Volker Hall Sandbox, thirty-two undergraduate pre-health students from around the country involved in the 2016 University of Alabama School of Medicine (UASOM) 2016 Summer Health Enrichment Program (SHEP) participated in simulated medical experiences designed to enhance pre-health skills. Dr. Marquita Hicks, Dr. Chrystal Rutledge, Dr. Carmel McNicholas-Bevensee, and Dr. Nadia Richardson worked together to create scenarios to address caring for people appropriate for pre-health students. Scenarios involved reinforcement of CPR training, recognition of social determinants of health and health disparities, as well as utilization of mental health first aid training.

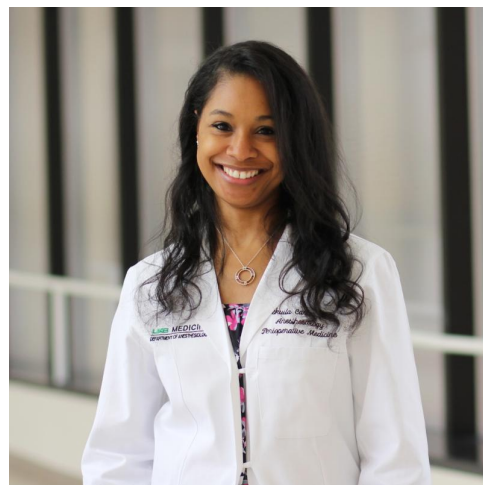


On July 8, visitors from the Robert Wood Johnson Foundation had the opportunity to observe interprofessional simulation experiences involving the 2016 UASOM Pre-Matriculation in Medical Education (PRIME) students and nursing students from the UAB School of Nursing. These visitors were on campus as part of a site visit for a Summer Medical Dental Education Program-Interprofessional Pilot grant of which UAB is a finalist. The grant proposal is a partnership among the UAB Schools of Medicine, Dentistry and Health Professions. The PRIME and SHEP programs are sponsored by the UASOM Office of Diversity and Multicultural Affairs.

Dr. Tekuila Carter Assumes Position of Director of the Department of Anesthesiology and Perioperative Medicine Simulation Program

Erin Blanchard, MSN, RN, CPAN

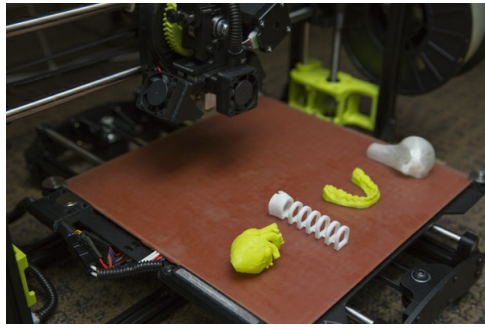
Effective July 1, Dr. Tekuila Carter took the position of Director of the Department of Anesthesiology and Perioperative Medicine Simulation Program. Over the past several months, she has been working in collaboration with the previous Program Director, Dr. Jeff Simmons, and Associate Director, Erin Blanchard, to plan and execute anesthesia simulations, including the Maintenance of Certification in Anesthesiology (MOCA) simulation course. Additionally, Dr. Carter attended the Center for Medical Simulation Instructor Program, Cambridge, MA, in 2016 and has received simulation development training through the Office of Interprofessional Simulation (OIPS) at UAB.



Dr. Carter, Assistant Professor of Anesthesiology and Perioperative Medicine, obtained her Doctor of Medicine degree from Meharry Medical College, Nashville, TN, in 2005 and completed her residency in anesthesiology at Vanderbilt University, Nashville, TN, in 2009. Before coming to UAB, Dr. Carter completed an Obstetric Anesthesia Fellowship at Vanderbilt University and was on the faculty of the Vanderbilt University School of Medicine for four years.

3D Printer

Brandon Smith, Clinical Simulation Specialist



In June, the Office of Interprofessional Simulation acquired a new Lulzbot TAZ 6 3D printer. The printer is capable of a print size of 11.02 in x 11.02 in x 9.8 in in a variety of materials including plastics, wood filaments and metals. The printer is reliable and easy to use with automated bed leveling and nozzle cleaning. One example of the use of 3D printing in clinical simulation is a printed proximal humerus bone to practice intraosseous access injections. A few of the first items we have printed include a trachea, lower mandible with teeth, a human heart and humerus bone. 3D printing can be used to create generic training models as well

as patient-specific models for teaching and surgical planning. 3D printed training models allow healthcare providers to learn in a low-risk, low-cost environment and perfect their skills before operating on real patients. With the use of 3D printing technology, the OIPS will be able to enhance the mission of improving health care education and patient care outcomes. If you have an idea for a 3D printing project, please contact Brandon Smith, smithbls@uab.edu.

OIPS Hosts Breakthrough Birmingham Scholars

Betty Farley, MSM & Lisa Bagby, MSN, RN

Our office was pleased to host ten middle school students and one teaching fellow on July 8, 2016 as part of Career Day for Breakthrough Birmingham students. This is the second year we have had the privilege of hosting students for Career Day. Breakthrough Birmingham is a national non-profit in education who works with high achieving Birmingham City middle schoolers to get them on the path to college. The program runs for 6-weeks in the summer with the goal of preparing the students for a college preparatory high school experience.



Breakthrough Birmingham scholars are highly motivated low-income middle-school students who aspire to go to college and work in professions like ours. During their time with OIPS, the students were divided into two groups and both groups experienced two simulations. During one simulation, the students were presented with a "person" who had no heartbeat. They learned how to use an AED through practice with a training model. For the second simulation, the students observed a "person" experiencing difficulty breathing and a rapid heart rate. Upon questioning the person, the students discovered the individual was allergic to bee stings and was in anaphylactic shock. Each student used a trainer to simulate the act of injecting an epi-pen as a life-saving measure.

The students were very excited and motivated. Their engagement was reflective of the response we hope for in every event we present. If you want to experience that excitement and engagement, join us soon for one of our courses.

OIPS Team Member Attends SimOps Conference

Tyler Burks, Clinical Simulation Specialist



This year SimOps was hosted by the Greenville Healthcare Simulation Center in Greenville, SC. I attended a number of sessions that were both interesting as well as informative. Many of the sessions easily tied in together. In one session, I learned some moulage tips and tricks and then attended a mass casualty simulation course that not only showed the application of the moulage, but also walked me through the logistics of such a huge event. Add to that some simple methods of capturing and streaming the audio and video, and the

big picture of the simulation starts to come together. Take the session on TeamSTEPPS to help your group work together more clearly and efficiently, and you finally start to understand just how much work goes into even the smallest simulation. To top off the whole thing, I attended the 3D printing and rapid prototyping session. Dr. Jim Mooney presented with a wealth of knowledge in this area. Not only did he walk us through the various types of 3D printing, he also had us create an articulating finger using a mold of our own finger tips and a couple pieces of 3D printed material. SimOps was a great experience providing a lot of knowledge, plenty of discussion, and even more networking.

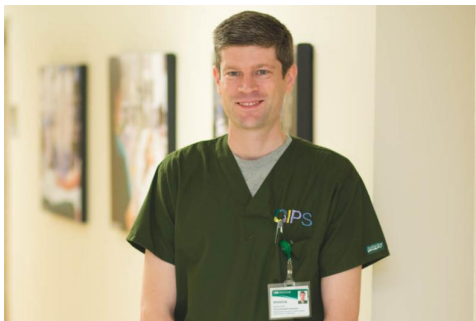
Camp Cardiac in the Volker Hall Simulation Sandbox

Chandler Stisher, MS2

This summer, the UAB School of Medicine was one of thirty-one institutions nationwide to host Camp Cardiac, a one-week summer day camp for high school students. Students from three southeastern states participated in this camp and were able to gain a unique hands-on experience with the Harvey® Simulator as well as the simulation manikins. By the end of the camp, students were able to recognize the sounds of basic heart murmurs thanks to Harvey® and really enjoyed the opportunity to learn from this simulator. The students were also challenged on the last day of camp with a real-world-scenario simulation with the manikins where they were able to practice history-taking and CPR training that they received earlier in the week. Overall, the students really liked both simulation settings, and we hope these experiences will encourage them to continue pursuing their goals of becoming future healthcare professionals.



OIPS Team Member Highlight - Brandon Smith



Brandon Smith is a Clinical Simulation Specialist for the Office of Interprofessional Simulation and joined the office this past May. Brandon is originally from Birmingham, and he attended Mississippi State University for his Bachelor of Science degree in Biomedical Engineering. He went on to earn his Master of Science in Mechanical Engineering from UAB, and he is a Certified SolidWorks Associate in Mechanical Design. Brandon has several years of research experience at UAB's Department of Ophthalmology, assisting in the study of glaucoma risk factors and injury. His hobbies are running and training for

marathons, 3D printing, and roasting his own coffee beans. Brandon's favorite food and drink are any item related to coffee. He is currently reading "The Great Bridge" by David McCullough, and his next vacation will be to Asheville, North Carolina with his wife.

Upcoming Events

August 9-12, 2016

IMS at UAB

August 16, 2016

SimConnect

August 22, 2016

Debriefing Practice

August 25, 2016

Advanced Debriefing

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



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

Seated (left to right): Tyler Burks (Clinical Simulation Specialist), Shilpa Register (Researcher V), Dawn Taylor Peterson (Director, Faculty Development & Training), Erin Blanchard (Simulation Educator Senior), Andres Viles (Simulation Coordinator Senior),

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

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