The Medical Record

Simulation Education for Improved Professional Practice

A Newsletter of the Richard A. Henson Medical Simulation Center • Salisbury University

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Welcome!

hank you for your interest in Salisbury University's Richard A. Henson Medical Simulation Center. We are located just south of main campus on Pine Bluff Road. This newsletter is designed to keep faculty and friends abreast of the happenings at the Sim Center. If you are interested in using the facilities for any of your educational needs, or have any questions, comments or concerns, please feel free to contact us at the directory information listed here.



Sim Center: 106 Pine Bluff Road, Salisbury, MD 21801 simcenter@salisbury.edu 410-546-5010

Spotlight: INGMAR ASL5000 Breathing Simulator.

Te are pleased to have welcomed INGMAR Medical's ASL 5000
Breathing Simulator to the Henson Simulation Center. We now have the ability to develop respiratory scenarios for patients (neonatal through adult) with a variety of disease states to enhance the simulated experiences offered to SU's respiratory therapy students.

The ASL 5000 provides mechanical ventilator training and ventilation management with sophisticated ventilators and settings. Through its use, students can adjust ventilator settings and respond to patient parameters in real time to understand effective ventilator therapy. This simulator also has the potential to provide students with hands-on experiences handling rare, catastrophic events, all while being in a safe environment, allowing students to develop the confidence and competence necessary to respond adequately as healthcare professionals.

There are several unique features that this simulator has to offer. The first is the ability to program parameter changes into the simulator software facilitating the development of standardized scenarios to be used across all students. The interactive control panel, however, facilitates breath-by-breath control with the capability to make on-the-fly changes in patient parameters. More than 90 patient parameters are recorded during simulation for data analysis and debriefing purposes. This allows students to evaluate the performance of the ventilator, evaluate the performance of respiratory therapy devices (e.g. CPAP, aerosol drug delivery devices) and evaluate their mode of ventilation selection.

The ASL 5000 can breathe spontaneously while being simultaneously mechanically ventilated. This simulator is the only neonatal spontaneously breathing simulator worldwide and it is available



for your use right here at SU! We encourage you to integrate respiratory scenarios into your classes, so please contact the Simulation Center staff to make reservations.





Faculty Research

hile a majority of the happenings in the Henson Simulation Center involve simulated experiences and highfidelity mannequins, one faculty member uses the Simulation Center for a very different purpose. Dr. Tom Pellinger, assistant professor in the Department of Health Sciences, performs clinical human research in the Human Performance Lab within the Henson Simulation Center. With a background in research dedicated to vascular perfusion and glucose

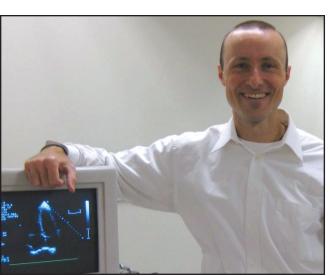
regulation in healthy individuals following exercise, Dr. Pellinger recently studied how postexercise hemodynamics in response to four different doses of acute exercise in those with diagnosed Type II diabetes. Preliminary results of this study were presented at the 2014 Experimental Biology Conference in San Diego, CA.

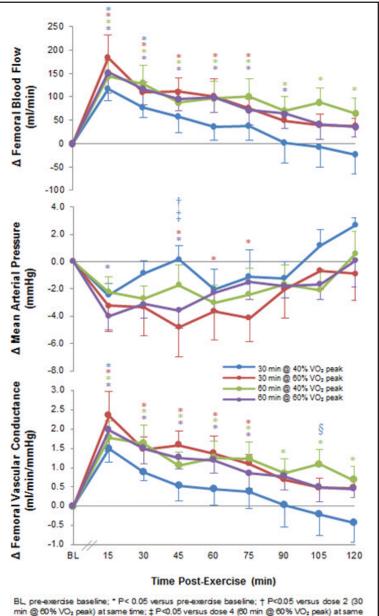
The most recent research endeavor explores the individual impacts of two non-invasive treatment modalities on acute leg blood flow and functional

capacity in those with peripheral arterial disease (PAD). If you would like to know more about the study, please contact Dr. Tom Pellinger at 410-677-0144 or tkpellinger@salisbury.edu.

Note: This study has been approved by the Salisbury University Institution Review Committee (IRB) on the use of Human Subjects in Research. If you have any questions about this or other campus related research, please contact the primary investigator or University Research Services at Salisbury University, 410-548-3894, toll free 1-888-543-0148 or humanresearch@salisbury.edu.







time; § P<0.05 versus dose 4 (60 min @ 40% VO2 peak) at same time; n=6

Special Events: Admitted Students Day.

he Henson Medical Simulation Center welcomed Salisbury University's admitted students into its center on March 28. Students – and parents – interested in SU's nursing and respiratory therapy programs toured the high-tech center and met the high-fidelity, life-like mannequins that provide clinical simulation experiences to SU students. Featured were four rooms dedicated to LDRP (labor, delivery, recovery and postpartum), neonatal, pediatric and psychiatric care where students are exposed to various conditions and situations, including complications during delivery, chronic illnesses and physical injuries. The staff of the

Simulation Center received enthusiastic comments from visitors regarding the importance of simulated scenarios to prepare students for their clinical experiences in the healthcare setting while providing opportunities for students to refine their clinical skills.

Learning Space Training

uring the first week of May, simulation specialists Deanna Schloemer and Catherine Pearce traveled to Sarasota, FL, where they visited the headquarters of CAE Healthcare and attended the Learning Space Basic Essentials training course.

Learning Space is so much more than a video recording software. This system is web-based, allowing faculty, students and simulation specialists to complete assignments, manage events and review performance videos from any location. Although Learning Space has the capacity to perform many functions as a whole, each individual user account can be customized to grant access to only the necessary components. This makes the system easy to navigate.

As learners, SU's nursing and respiratory therapy students have access to several components that are key to properly preparing for and learning from simulation experiences. The first are pre-encounter checklists and/or assignments, which provide students with information (i.e. preparation questions, patient history, etc.) regarding their upcoming simulation. The software will then record the students during simulations and grant them web access to review his/or videos. Access to review videos can be set for a predetermined period of time after the encounter. Once the learner has completed the simulation and reviewed his/her video, he/she can complete evaluations to asses self-, peer- and standardized patient performance. These evaluations are confidential, and thus, they only are

available to the evaluator and the individual being evaluated. Additional evaluation tools that are available include post-experience assignments, evaluation of the simulation center and evaluation of the simulation experience.

Instructors can use Learning Space to evaluate students' preparation for and performance during a simulation. Grading rubrics can be uploaded by simulation specialists prior to an event so that instructors can complete them while a learner is participating in a simulation. During this time, instructors also can make annotations to provide students with feedback. The rubric and annotations are viewable by students during video review. Instructors also have the access to view and evaluate students' pre- or post-encounter questionnaires. Learning space can be utilized as an evaluation tool, and data can be analyzed and exported as reports. There are more than 25 types of reports available for faculty and learners.

Simulation specialists will use the Learning Space software to track resources. Resources to be tracked include standardized patient, faculty and staff hours, as well as the use of simulators, cameras, rooms and equipment. Reports can be generated to display resource usage by user, event and/or time period. There are custom reports available for PDF, XLS and HTML formats so that specialists can track all of the resources used in simulations.

As you can imagine, Pearce and Schloemer came back from this training with an abundance of ideas to better utilize Learning Space here at the Richard A. Henson Medical Simulation Center. This fall, we plan on implementing a pre-encounter assignment for respiratory therapy students to complete the evening before their scheduled simulation day. Resources will be assigned to the simulation for tracking purposes. After the simulation, learners will log in to the software, review their recordings and any evaluations that the instructor has entered, and complete a postencounter assignment that will include evaluations of self-performance, the simulation and the Simulation Center. Respiratory therapy students will complete this information prior to their first simulation and their last simulation of the semester. Data can then be compared to evaluate how a student's learning and perception of simulation has changed throughout the semester.

If you are interested in implementing any of these ideas into your simulations in the upcoming semesters, please feel free to contact simulation specialists at the directory information listed at the top of this newsletter.

Henson Scholarship Lunch

n May 6, the Henson Simulation Center hosted the Richard A. Henson Scholar's Luncheon. Members of the Henson Foundation were in attendance and spoke of Mr. Henson and his many achievements. Student recipients of the Henson Scholarship, or Henson Scholars, then addressed the members to talk about how much the scholarship means to them and how it is has impacted their lives, personally and academically. Everyone then enjoyed a nice lunch before being invited to tour the Simulation Center. The tour consisted of introductions to our mannequins and the opportunity to speak with current nursing and respiratory therapy students. The highlight of the tour was the opportunity to see our newest manikin, Lucina, demonstrate a birthing simulation.



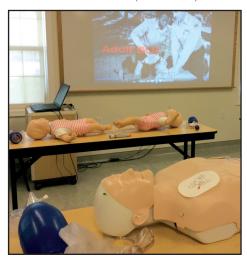
First Aid & CPR Certification Courses_

The Richard A. Henson Medical Simulation Center offers a wide range of courses including American Heart Association (AHA) First Aid and Cardiopulmonary Resuscitation (CPR). Our courses provide comprehensive information and skills that prepare individuals to respond in emergency situations.

By training with us, you are supporting and investing in your university. All profits are re-invested into our center to fund and support the educational experiences of Salisbury University students and other center initiatives.

AHA BASIC LIFE SUPPORT FOR HEALTHCARE PROVIDERS COURSE INFORMATION

The Henson Medical Simulation Center offers the American Heart Association's Basic Life Support for Healthcare Providers (BLS HCP)



course. This course is designed to provide healthcare professionals the ability to recognize several lifethreatening emergencies and respond in a safe, timely and effective manner. It includes adult, pediatric and infant CPR skills plus advanced techniques such as bag-mask ventilation, rescue breathing, choking and AED training.

The content of this course is appropriate for individuals who are working or plan to be working in the health care field and require this level of training.

A re-certification course is also available for individuals who have a current AHA BLS HCP certificate and wish to re-certify their skills.

UPCOMING AHA BLS HCP

COURSES (First-time Takers) To register, please visit: webapps.salisbury.edu/simcenter/educ The cost for each class is \$80.

Monday, July 13, 2015 8 a.m.-noon Monday, July 27, 2015 8 a.m.-noon Friday, August 7, 2015 8 a.m.-noon Friday, August 14, 2015 8 a.m.-noon

LOOKING FOR CERTIFICATION, BUT THESE OPTIONS DON'T WORK FOR YOU?

Contact the staff of the Richard A. Henson Medical Simulation Center at 410-546-5010 or simcenter@salisbury.edu for additional options.

Education Corner CPR, First Aid, Blood and Body Fluids Precautions

Thile the Richard A. Henson Medical Simulation Center supports learning experiences to supplement academic studies to SU students, it is our mission to also support the medical educational needs of local healthcare providers and community members. Current educational courses offered include Basic Life Support for Healthcare Providers: Heartsaver First Aid, CPR and AED; and Heartsaver Bloodborne Pathogens. We currently are supporting the educational needs of Bay Shore Services and have certified 82 people in BLS, First Aid and Bloodborne Pathogens since the start of the 2014-2015 academic year. Upcoming classes also are scheduled for Bayshore Services and incoming students in the 2015-2016 academic year. Please contact the Simulation Center staff with any questions that you may have or to schedule a class. We'd be happy to work with you.