UCI Simulation

### Spring/Summer 2019

Issue 13



IRVINE

**Cameron Ricks, MD** Director, Medical Education Simulation Center

This has been a whirlwind year thus far. We have had medical student curriculum changes, the retirement of Sue Ahearn at the Clinical Skills Center, the addition of Dr. Alisa Wray as the Director of Clinical Skills Assessment and Clinical Foundations, the first year of the Dean's Scholars program, and increasing utilization of the Bill and Sue Gross School of Nursing.

We are excited that the Bill and Sue Gross School of Nursing is settling in and adding more and more medical simulation and skills training to their curriculum. In fact, to date thus far, the School of Nursing is utilizing the Medical Education

Simulation Center as much as the current residency programs (11% total operational utilization). We look forward to them maturing their simulation curriculum and utilization in the future. Tiffany Nielsen and the entire cadre of nursing instructors are doing an outstanding job. Tiffany will be joining me to help instruct the Simulation Instructor Training Course (SITC) in late June, which in itself, will make the first time that we will have instructors from both schools.

I attended and spoke at the UC Simulation Consortium last month in UC San Diego. In addition to sharing operational and curricular information, the consortium is in discussion if a simulation-based education solution is feasible across all the UC schools for sepsis recognition and treatment.

Finally, I was fortunate enough to attend the International Meeting on Simulation in Healthcare (IMSH) and see all the different medical simulation vendors doing great things with fidelity, augmented reality, and virtual reality. I met with simulation fellows past, present, and am pleased that many continue to educate and mentor via medical simulation.

Opento

As of 1 July 2019, the Medical Education Simulation Center will no longer be supporting Advanced Cardiac Life Support (ACLS) HeartCode courses.

ACLS courses can be scheduled through UCIMC: <u>http://www.ucihealth.org/hr/training-development/clinical-training</u> certification

<b>March</b> 29	Cesar Chavez
<b>April</b> 29 – 30	Maintenance
<b>May</b> 27	Memorial Day
July 4	Independence Day
Septem	
2	Labor Day



Simulation Education Network

## **UC Simulation Consortium**

The UC Simulation Consortium held its 5<sup>th</sup> annual face-to-face meeting at UC San Diego in mid-January. Representatives from all the major UC system universities were present.

This consortium allows for all the simulation organizations across all of the UC campuses to interact and share ideas.

In addition to sharing operational aspects of each campuses' simulation programs, this year, the consortium invited sepsis champions from all over the UC system. There was a discussion centered on sepsis bundling and potentially how medical simulation can effect change in recognition and treatment of sepsis.





Dr. Ricks providing an update of UC Irvine's simulation activities during the UC Simulation Consortium

### In Situ Events

When running an in situ event, it is always a good idea to create an equipment checklist that includes medical supplies, simulators, and any medical equipment you will be using. That way when the event is over, you can review your checklist to ensure that all of the equipment and supplies that you brought are returned to the center and importantly, not left in clinical areas.

### Do you want to teach medical students?

We are recruiting a cadre of faculty to help instruct some of the basic science simulation sessions next academic year.

Instructing at the undergraduate level looks great if you are seeking advancement within the UC system.

Minimum commitment time is 4-hours

Contact our office for details 949.824.8835 or Contact Dr. Ricks or Dr. Wray directly

## **Technical Tip**

### When did you last reboot?

As most people know, many different software programs we run on the



computer's "leak" memory. Essentially, the program will use part of the random access memory, or RAM. The loss of memory can significantly affect the operations of other programs, without your knowledge, often until it is too late. One process that is recommended to help combat this problem is to ensure the simulator and AVS computers are rebooted frequently.

Anytime you are running a high stakes simulation and will be recording the session, reboot both systems prior to running the class/session.

### **UCI** School of Medicine | Medical Education Simulation Center



### Keith A. Beaulieu

**Director of Operations** Medical Education Simulation Center

### **Budget and Planning**

A draft budget is currently being developed to send to Medical Education and the Dean's office for academic year 2019-2020.

Beginning of the year, the simulation center completed a strategic plan that aligns with both Medical Education and UCI Health. The 2018-2023 Strategic Plan can be found <u>here</u>.

#### **Capital Purchases**

There are currently no projected capital purchases at this time.

#### **Disposable Supplies**

In the past, we have ordered all disposable medical supplies through UCIMC's central distribution supply warehouse; as of earlier this month, we have transitioned to Medline for medical supplies per a contract with UCIMC. This should not have any effect on the availability of supplies, but it will make it more difficult to know exactly what the hospital uses and try to order that exact product. Therefore, when you come to the simulation center, just be aware that the supplies used may not accurately reflect what UCIMC uses. We do strive to be as accurate as possible, and certainly recommend bringing supplies if you want to train on specific supplies. Give us a call and we can tell you what we have. We just ask that you leave all "real" medication at the hospital.

#### **Storage Space**

Storage space of supplies and equipment is always a premium at Medical Education, as such, over the next

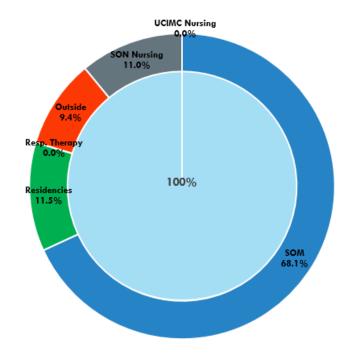
year, the simulation center will be whittling away at the amount of stored medical supplies that we carry on hand to a minimum. We will keep some highutilized supplies on hand; however, with the Medline system, the center will be going to a "just-in-time" method of supply management. This will make it that much more important to communicate your program/sessions needs ahead of time to ensure we have adequate supplies available.

#### Scheduling

Residency scheduling requests for the next academic year are now being accepted. Once the School of Medicine and School of Nursing schedules are slotted, we will confirm your requests, likely June 2019.

All requests for scheduling can be submitted via the <u>http://medsim.uci.edu</u> website. If you have any questions regarding scheduling, please contact us at 949-824-8835.

### Simulation Utilization by User as of 1 Feb 2019



## Simulation Faculty Development

### Faculty Development Video Series

The Medical Education Simulation Center has created a Faculty Development Video series.

### http://sites.uci.edu/medsim/education/facultydevelopment/

After completion of the video series, please contact Keith Beaulieu, <u>kbeaulie@uci.edu</u> and he will email you a completion certificate for your records.

### Medical Education Simulation Center Resource Website

The Medical Education Simulation Center has a resource website, in addition to the main website.

This website has curriculum resources, past newsletters, past annual reports, policies and procedures, and educational materials.

http://sites.uci.edu/medsim/

### Simulation Instructor Training Course (SITC) 1-day Course



When: 28 June 2019
Where: Medical Education Simulation Center
Time: 0730 breakfast, 0800-1600 course
Cost: \$350 for SOM and SON student instructors
\$500 for other UC Irvine affiliated instructors
\$1000 for non-UC Irvine affiliated instructors

www.medsim.uci.edu/sim\_instructor.asp to register The UC Irvine Medical Education Simulation Center is offering an intensive one-day Instructor course designated for healthcare simulation instructors. The course is designed to combine elements of theory, practice, and immersive experiential learning focusing on simulation as a teaching tool. The course will allow participants to learn about the history, context, and theory of patient simulation, debriefing strategies, and designing simulation curriculum. Participants will also have the opportunity to apply skills learned through deliberate practice.

### Want to know more about simulation operations?

The Medical Education Simulation Center Resource Website contains sample spreadsheets that would help smaller or resource-constrained programs in keeping up with equipment, inventory, and instructors.

https://sites.uci.edu/medsim/operations/



SON Nursing faculty and simulation specialist observe a nursing simulation

## Simulation around UC Irvine

### Medical Education Ultrasound





### Anesthesia Perioperative

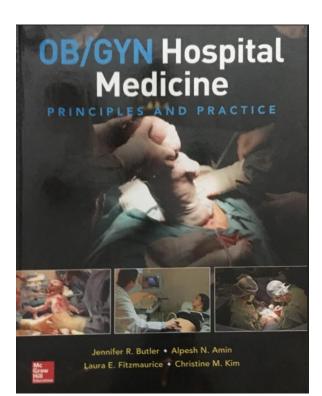
The OB/GYN Hospitalist colleagues have published the first hospitalist textbook, **OB/GYN Hospital Medicine: Principles and Practice**.

Several of our Anesthesia faculty were asked to contribute chapters. Drs. Corey Nelson, Christine Kim, and Adam Crosland provided Chapter 19: <u>The Role of Simulation for the OB/GYN Hospitalist</u>.

Drs. Corey Nelson, Ho Choi, and Dmitry Portnoy wrote Chapter 42: Obstetric Anesthesia.

The text book can be purchased through Amazon.com <u>here</u> or Barnes and Noble <u>here</u>.

The Department of Anesthesia and Perioperative Services continues to train residents and medical students using medical simulation and skill task training techniques.





Congratulations to Dr. Cameron Ricks for making the cover of Medical Training Magazine and being a patient safety advocate!

## Simulation Fellowship around UC Irvine

### Medical Education Simulation Center

Dr. Al-Khofi is approximately 50% through his fellowship. He has observed many simulations and has been active in instructing MS 1 and MS 2 simulation sessions.

Dr. Al-Khofi is also conducting research in simulation.

Most recently, Dr. Al-Khofi attended IMSH with Dr. Ricks to gain further insight into simulation and see the latest products available.

At the conclusion of his fellowship, Dr. Al-Khofi will return to Saudi Arabia and teach medical simulation for residency programs there.



Dr. Al-Khofi and Dr. Ricks at IMSH 2019

### **Emergency Medicine Simulation**



Dr. Honda is over halfway through his emergency medicine simulation fellowship. After completing his fellowship, he has secured a position in Hawaii and work clinically as well as become involved in medical education at the University of Hawaii.

### UC Sue & Bill Gross School of Nursing



## International Meeting on Simulation in Healthcare (IMSH 2019)

The SON Simulation Team comprised of Dr. Tiffany Nielsen, DNP, APRN, FNP-C, Michelle McCoy, MHA, and Kristy Doan, BS attended the International Meeting on Simulation in Healthcare Conference in San Antonio, Texas on January 26-30th. The conference provided hands on workshops, simulation expert led learning sessions, and an exhibit hall featuring the latest in technology for simulation for health care. The SON plans to increase simulation across all clinical courses and IMSH provided invaluable learning opportunities that will benefit nursing students in preparations for clinical practice.





### SON Critical Care Bootcamp

On Tuesday, January 8, 2019 the SON held their annual Critical Care Bootcamp for 75 nursing students under the instruction of Dr. Tiffany Nielsen, DNP, APRN, FNP-C, Faculty Christina Bowles, MSN, APRN, FNP and several UCI Health Nurse Educators who serve as Clinical Instructors. Students benefited from multiple simulation scenarios in acute care settings.



Nursing Students perform an assessment on the patient during a high-fidelity simulation

In the fall quarter, all senior nursing students participated in one Pediatric and one Obstetrics highfidelity simulation scenario as part of their course curriculum. The Pediatric simulation scenario involved a 5 year old with status epilepticus in the emergency department. The students were challenged with having the child's "parent" in the room and juggling patient care in an emergency situation with communication and support of family members. This simulation experience was led by the Pediatric faculty of record, Professor Kathy Saunders, as well as Simulation Coordinator Dr. Tiffany Nielsen and Family Nurse Practitioner, Dr. Susie Phillips. The Obstetrics simulation scenario was centered around care of a mother who recently delivered a healthy child that develops a postpartum hemorrhage. A "boggy" or soft uterus was simulated on the Simulation Mannequin as well as fake blood on chux pads to simulate the hemorrhage progression. The students had to weigh the blood soaked pads in order to estimate the patient's blood loss and act quickly to identify the cause of bleeding and initiate interventions to stop it. The OB faculty of record, Dr. Sara Brown, as well as the Director of Nursing Pre-licensure Programs and Certified Midwife, Leanne Burke, and Simulation Coordinator, Dr. Tiffany Nielsen led this simulation experience.

The junior nursing students participated in 3 different simulation cases incorporated into their Nursing Foundations course, led by faculty of record, Professor Stephanie Au, as well as Professor Sarah Campbell, Professor Maureen Movius, Dr. Tiffany Nielsen, and PhD students Trish Saul and Val Pham. At first, the simulation scenarios for the junior students were very simple, to allow students to become comfortable with simulation, their assessment skills, and patient care. As the quarter progressed, the simulation scenarios increased in complexity, incorporating various learning objectives and progressive skill development. The scenarios included simulation pathologies of







pneumonia, diabetes, cellulitis, pressure ulcer, bowel obstruction, malignancy, and respiratory depression that required a variety of nursing skills and interventions such as physical assessment, therapeutic communication, SBAR reporting, medication administration, recognition of patient status changes, and abiding by hospital policies and procedures.

# **SIMulation Interest Group**

Simulation Interest Group is made up of medical students interested in medical education and medical simulation.















## Past Simulation Fellows Update

#### Dr. Asif Rahman

Dr. Rahman currently Physician Simulation lead in the Emergency Department at Kaiser Downey Medical Center. He also participates in the hospital patient safety committee that utilizes multidisciplinary simulation as a means of achieving hospital wide patient safety. Along with these roles at the Downey Medical Center, he also serves as a member of the Regional Simulation Development Committee in the Department of Emergency Medicine.

### Dr. Rheem Almhizai

Dr. Almhizai is currently Consultant of Pediatric and Assistant Professor in pediatric and clinical simulation at Al-Imam Mohammad Ibn Saud Islamic University. She is a Member of Medical Education Department at Al-Imam Mohammad Ibn Saud University, Member in Saudi Society for Simulation in Health care, and Member in Scientific and scholar group of the Saudi Society for Simulation in Health care. She is also an active board member of Medical Simulation Centre in at Al-Imam Mohammad Ibn Saud University.

#### **Dr. Corey Nelson**

Dr. Nelson is currently Director of Simulation for Anesthesiology & Perioperative Care, Co-Director Center for Perioperative Care (Preoperative Services), and Director of Perioperative Surgical Home Interdepartmental Resident Course, for Department of Anesthesiology & Perioperative Care School of Medicine University of California, Irvine.

### **Dr. Kimberly Sokol**

Dr. Sokol is currently the Director of Simulation at Kaweah Delta in Vasalia, California. She is also physician simulation lead for the Emergency Department and is responsible for resident and inter-professional simulation-based training.

### Dr. Anne Beissel

Dr. Beissel continues to work in Emergency Pediatrics in Lyon, France and uses the experiences gained in her fellowship to help instructor and train physicians in Lyon, France.

Her fellowship research, A Trans-Atlantic High-Fidelity Mannequin Based Telesimulation Experience, was published in *Anaesthesia Critical Care & Pain Medicine*, Volume 36, Issue 4, August 2017, Pages 239-241.

### **Noteworthy Links**

- Medical Education Simulation Center Resource Site Medical Education Simulation Center Main Site UC Irvine College of Health Sciences UC Irvine School of Medicine UC Irvine, Bill and Sue Gross School of Nursing Surgical Education Center UCI Health Society for Simulation in Healthcare Association of Standardized Patient Educators International Association for Clinical Simulation & Learning SimGHOSTS
- http://sites.uci.edu/medsim/ http://www.medsim.uci.edu http://www.healthsciences.uci.edu/ https://www.som.uci.edu/ https://nursing.uci.edu/ http://www.surgicaledcenter.uci.edu/ http://www.surgical

### Medical Education Simulation Center Mission

The Medical Education Simulation Center advances UCI Health's mission of DiscoveroTeachoHeal by developing, delivering, and evaluating pre-clinical, graduate, and interprofessional medical simulation education and training activities for learners, faculty, and staff to enhance competence and strengthen collaborative practice across the continuum of care.



Mission

Discover • Teach • Heal



If your organization has a simulation related story you wish to share in this newsletter, please contact Keith Beaulieu, kbeaulie@uci.edu.

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