

UCI Simulation

Fall/Winter 2017

Issue 10



Cameron Ricks, MD

Director

Since the 2016-2017 academic year come to a close, the simulation center accomplished 2,000 hours of simulation activities and 25,000 hours of total participant hours to a total of 7,000 participants.

School of Medicine medical student simulation activities represented 61% of the total time, residency activities represented 18.2%, UCIMC code training activities represented 4%, School of Nursing represented 0.7%, and outside

Overall simulation center average utilization was 68% (\uparrow 15% from 2015-2016). This represents a very efficient operation and in line with industry standards. Our staffing average utilization was 111% (\uparrow 17% from 2015-2016). This overutilization was mainly due to a simulation specialist staffing shortage from September to January.

activities, such as AHA BLS and ACLS and MOCA represented 17.6%.

We were lucky enough to have Dr. Rheem Almhizai from Saudi Arabia, as an international simulation fellow for the year, and Dr. Kimberly Sokol, as the Emergency Medicine simulation fellow.

We presented **one (1) research abstract**, which was published in the Simulation in Healthcare Journal, December 2016.

We had **one (1) manuscript accepted** to be published in *Anaesthesia Critical Care* & *Pain Medicine* on the topic of telesimulation.

CURRICULUM HIGHLIGHTS

Simulation curriculum underwent a lot of changes this year. Most of the simulation activities were moved out of the basic sciences into the Clinical Foundations courses. Biochemistry and Neuroscience simulation activities remained unchanged. This was also the first year for the CSI (clinical skills immersion) model, which carried the topics/modules from clinical skills and ultrasound to simulation. The simulation center added an additional 7 simulation sessions including a simulation orientation session for the incoming MS 1 students. In addition to changing the curriculum, 22 scenarios were written.

Continued on next page

Closures

November

10 Veteran's Day23-24 Thanksgiving

December

25-31 Holiday Break

January

1-2 Holiday Break15 MLK Holiday

February

19 President's Day

Code Training

(Simulation Based Team Training)

Oct 4 8a-1030a

Nov 16 8a-1030a

Dec 4 1p-330p

Location: UCI Medical

Center, Building 50
Sign up today!



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American Society of Anesthesiologists

Simulation Education Network

As director, I am also **involved in Clinical Practice Exams**. This experience will not only help drive future simulation sessions but also begin the process in assessment with simulation-type activities in the school.

FINANCIAL HIGHLIGHTS

We continue to operate on a lean budget; however, the center was allocated funding for much needed pediatric simulator and replacement gurneys.

LOOKING AHEAD

As we look ahead into this academic year, there are less dramatic sweeping simulation session changes but rather finessing the curriculum established last year. **We have been asked to take on a projected additional 128 hours** that the School of Nursing requested.

We are looking to continue to represent UCI at international conferences for simulation. We currently have 3 research abstracts submitted for 2018 International Meeting for Simulation in Healthcare. If accepted, our staff will present our research and ideas.

Finally, we are actively recruiting instructors to facilitate our medical students. All sessions are Tuesday and/or Thursday afternoon, and we ask a 4-hour commitment. If you would like to teach basic science instruction via medical simulation for MS 1 and MS 2 students, please contact me.

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 year.

Possible topics include:

- Cardiovascular Physiology,
- Neuroscience,
- Microbiology, and
- Biochemistry

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 directly

Quh.

Cameron Ricks, MD

Director, Medical Education Simulation

UC Simulation Consortium

Meetings

On September 22nd, Dr. Ricks and Danica Rogacion attended the 4th Annual Fall UC Simulation Consortium Meeting. Medical directors and operational directors from UC San Francisco, Davis, LA, and San Diego came together to discuss UC simulation in a one-day summit.

This year's meeting was held at UCLA, and included discussion on operations, research collaboration, simulation fellowship, and amendments of the vision, mission, and bylaws.

The UC Office of the President Risk Management was present at the meeting to share ideas and goals for a collaborative research project for FY 17-18.

As last years' consortium chair, Dr. Ricks helped with the planning of this year's meeting and shared updated on UC Irvine's simulation programs.

Simulation Interest Group (SIMIG)

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

<u>Upcoming Activities:</u> SIMtoberfest October 16 The interest group will host 50 first and second-year medical students for a three hour skills workshop which includes a Halloween-themed simulation cases

Interprofessional Simulation-based Team Training (Code Training)

Simulation-Based Team Training at UCIMC Academic Year to Date

Total Sessions: 1

Total learner hours: 17.5 **Total learners Jul – present:** 7

Total Sessions since Inception: 33 Total learner since Inception: 239

Important Upcoming Dates

October

- 6 MOCA
- 9 MOCA
- 16 SIMtoberfest
- 28 Open Medical School

November

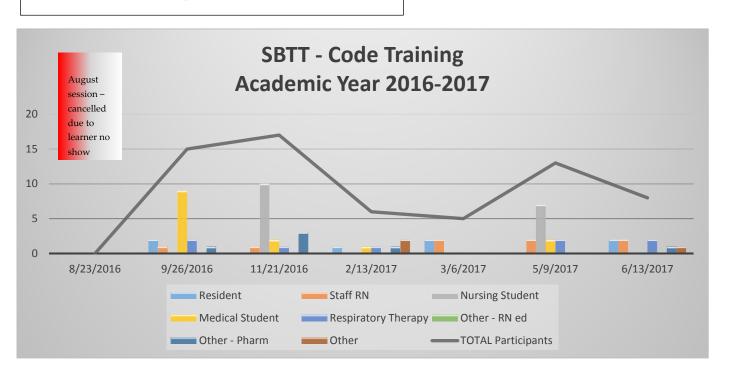
- 6-9 MS 3 Intersession
- 16 SBTT-Code Training (Bldg. 50)
- 17 MOCA
- 19 MOCA

December

- 4 SBTT Code Training (Bldg. 50)
- 11-12 ATLS

January

20 Peds Day



Emergency Medicine Simulation

SACM Prestige Research Training Program Preparation For Residency

The SACM PRESTIGE (Program in Research: Elevating Standards in Graduate Education) Research Training Program is a one-year certificate based program to prepare International Medical Graduates (IMG) for medical residency applications and future success. This program based at UC Irvine Health Medical Center will combine structured faculty mentored medical education instruction through advanced studies in biomedical, translational, public health research along with clinical observerships and the latest medical education training modalities.

- The foundation for learning will be based on one to one research with a faculty mentor by participating in one or more research projects at least 3 days a week.
- Weekly clinical observership.
- Professional development in translational research concepts, point-of-care bedside ultrasound, simulation medical technology, and bedside clinical examination

For more information, please contact:

Melissa Pham, Fellowship Coordinator
Department of Emergency Medicine
UC Irvine Health School of Medicine
333 City Blvd West, Suite 640, Route 128-01
Orange, CA 92868 USA
Phone: 1-714-456-5922

Perioperative Simulation Center

Expansion with Interdisciplinary In Situ Simulation

As you may know, the Department of Anesthesiology & Perioperative Care and Perioperative Simulation Center have been partnering with the Departments of Obstetrics and Gynecology and Perinatal Nursing to provide monthly interdisciplinary in situ simulation training sessions for the past 3 years. These sessions have provided opportunities to evaluate systems and improve processes. Several near miss situations were identified and corrected by these activities. Overall, the program is widely accepted by participants, and mechanisms are in place to help distribute key learning points to the respective departments.

Using our experience with these trainings, the Department of Anesthesiology is collaborating with the Departments of Trauma Surgery, Emergency Medicine, Pathology, Blood Bank, and Perioperative Nursing to run two trauma simulations, which take a patient from the Emergency Department to the Main Operating Room. The first of these sessions has already occurred, and the next will happen before the end of the year.

These in hospital simulations have been a wonderful opportunity for collaboration and have certainly helped to get important conversations started between departments. In addition, they highlight how simulation as a teaching modality can certainly advance many of our goals; discovery through the investigation of hospital processes, teaching clinical knowledge and team building skills, healing through the improvement of vital health delivery systems like the rapid infusion protocol, and finally, service by having a variety of departments dedicate time and resources to improve quality and safety.

For more information, please contact:

Corey Nelson, MD

Director of Simulation for Anesthesiology & Perioperative Care Department of Anesthesiology and Perioperative Care



The Medical Education Simulation Center held a "Staff Open House" on September 12, 2017 as part of Healthcare Simulation Week 2017.

The simulation staff was able to share their knowledge of simulation and

showcase the different technology and equipment that is

used to teach medical students. Some staff members were able to practice their CPR skills on the manikin.



Simulation Fellowship around UC Irvine

Medical Education Simulation Center

We are sad to see her go, but Dr. Almhizai has completed her Simulation Education Fellowship. Over the past year, she has been instrumental in creating many of the new scenarios that were added to the curriculum, and taught over 40 hours of medical simulation to medical students, 16 hours of residency skills to UCI's first year





Dr. Almhizai

residents during the annual resident skills day, and led multiple tours and demonstrations to outreach organizations.

We hope to see Dr. Almhizai back in a few years for another fellowship focusing on simulation education research!



Dr. Sokol observing an EM simulation session

Emergency Medicine Simulation

Dr. Kimberly Sokol is in the 2nd year of a two year simulation fellowship with the Department of Emergency Medicine.

Dr. Sokol has been active in creating new medical student scenarios and has over 40 hours of medical student instruction last year, on top of her clinical requirements. Dr. Sokol has also taught simulation-based code training at UCI Medical Center and is an instructor for the Simulation Instructor Course. Most recently, she was a primary instructor of the center's one -day Simulation Instructor Training Course (SITC) that was held for nursing faculty.

Dr. Sokol is also active in the Simulation Interest Group and research for the Department of Emergency Medicine.

Sue & Bill Gross School of Nursing

On September 18, 2017, the nursing faculty and staff attended a one-day Simulation Instructor Training Course (SITC) at the Medical Education Simulation Center as part of a ramp-up initiative for increased simulation education at the School of Nursing.

Topics included: Simulation in Nursing, Debriefing in Simulation, and Operations overview.

The School of Nursing, now aligned with the College of Health Sciences, will be increasing



Dr. Sokol playing a "confederate" during the Simulation Instructor Training Course

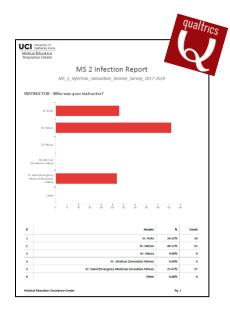
the utilization of simulation education at the Medical Education Simulation Center this academic year. Overall, the School of Nursing is looking at adding 128 hours of simulation-type activities across their curriculum.



Quality Initiatives Medical Education Simulation Center

This academic year, the Medical Education Simulation Center started some quality initiatives to better align ourselves with *best practices, to improve efficiency, and provide better overall service to our stakeholders*.

This includes: discontinuation of paper sign-in, the use of badging in for attendance, the use of Qualtrics® for post-simulation surveys, and provide more feedback from the program office to simulation instructors.





Keith A. Beaulieu

Director of Operations

Medical Education Simulation Center

Budget and Planning

The budget was submitted to the SOM in February. To date, the full budget has not been approved and we are operating under the "draft" budget as of this moment.

Capital Purchase planning

Our two work horses (SimMan 3Gs) are at end of life, so we are preparing to purchase one SimMan 3G this academic year, and a second one the following year.

Scheduling

All submitted course/session requests were plotted and scheduled; we are now operating on the normal scheduling process.

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

Block Change this year

We started this academic year with the "block" methodology of scheduling. Overall this has gone very well and has decreased the lunch bottle neck completely.

Block 1 0800-1200 (8a-noon)

Block 2 1300-1700 (1p-5p)

Curriculum

This year the curriculum is largely staying static. We are adding a GI simulation session and changing the Neuro/psych session to just Neuro

Curriculum resources as well as medical education and simulation resources can be found at http://sites.uci.edu/medsim.

Student Sign in, Disclosure, and Surveys

As part of the simulation center's quality improvement processes, we started this academic year having the students sign-in and disclosure forms to electronic medium.

Student sign in

Is being accomplished with badge swipe at the beginning of the session. The data will be sent to the clinical foundation coordinators for attendance purposes.

Confidentiality and Disclosure

All MS 1 and nursing students are required to fill out a confidentiality and disclosure form via Qualtrics at Simulation Orientation. This will be applicable for all 4 years of medical school or 2 years of nursing school, respectively.

Surveys

All surveys are now being conducted through Qualtrics. Hard paper copies remain an option as back up. UCI EEE is now a legacy platform and only used for data retrieval.

Instructor Evaluations

Per our policy, we will soon be starting the simulation instructor evaluations for this academic year. Information pertaining to the process can be found here: https://youtu.be/6K_1tAzLZNo or by logging on to the Medical Education Simulation Center Resource Website: http://sites.uci.edu/medsim/education/faculty-development/.

Mobile Simulation

Medical Education Simulation Center Current Operational Metrics

All data as of 1 July 2017

Mobile simulation is no longer viable at UCI. The manikins, hardware, and equipment have all been turned over to Nursing Education. The manikins are still a hospital asset. Please contact Nursing Education for access.

The mobile simulation vehicle is housed at the warehouse currently pending disposition.

Faculty Development Video Series

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

http://sites.uci.edu/medsim/education/faculty-development/

After completion of the video series please contact Keith Beaulieu, kbeaulie@uci.edu 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/

MEDICAL EDUCATION SIMULATION CENTER TOTAL TIME BY DEPARTMENT AY 2016-2017



% Hours Actual Sim Operation	% Hours Prep	% Hours Admin
71%	14%	15%
43%	15%	43%
61%	17%	22%
64%	16%	20%
58%	19%	23%
63%	15%	22%
61%	14%	25%
59%	16%	24%
62%	14%	24%
68%	13%	18%
61%	16%	23%
62%	15%	23%

61% 15% 24%

Utilization by Month

Center	Staffing
73%	103%
39%	92%
82%	135%
88%	137%
85%	145%
86%	138%
66%	109%
62%	105%
58%	93%
70%	102%
53%	87%
57%	91%
	73% 39% 82% 88% 85% 86% 66% 62% 58% 70% 53%

Overall Avg	68%	111%

*Nationwide simulation center average utilization is 60%

Did you know?

Simulation is pertinent in the following Liaison Committee on Medical Education (LCME) sections:

- 6.5 Elective opportunities
- 7.2 Organ systems/Signs/Symptoms/Differential Diagnosis
- 7.4 Critical Judgment/problem solving skills
- 7.5 Societal Problems
- 7.6 Cultural Competence
- 7.7 Medical Ethics
- 7.8 Communication Skills
- 7.9 Interprofessional Collaborative Skills
- 8.3 Curricular Design, Review, Revision/Content Monitoring
- 9.4 Direct Observation of Core Clinical Skills

AHA Statistics

2016-2017

The Medical Education Simulation Center processed:

293 Basic Life Support (BLS) applications and skills assessments

<u>63</u> Advanced Cardiac Life Support (ACLS) applications and skills assessments

Medical Education Simulation Center Mission

To provide state-of-the-art health care education and research using medical simulation technology to promote superior clinical care and patient safety by delivering quality immersive education to healthcare professionals and the community.



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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