Improving patient care through simulation-based education and scholarship
Our Mission | The Simulation Center’s mission is to provide creative, innovative, simulation-based education and scholarship for the students, residents, and faculty of UT Southwestern and for the health care practitioners in our community.

Directors’ Message

The UT Southwestern Simulation Center brings the future of health care education to today’s students and practitioners. When our doors opened on Sept. 4, 2018, the 49,000-square-foot Simulation Center embarked on its vision to improve patient care delivery by encouraging the development of innovative ways to train health care providers and by centralizing simulation-based activities on campus – including offerings for all specialty areas and disciplines.

As we look to the future, our Center aims to push the boundaries of innovation, lead through best-practice education, and be a champion of campuswide simulation adoption in academic health care centers. To reach these objectives, we structured our strategic framework to align with UT Southwestern’s mission, vision, and strategic goals. With the idea of bringing the future of health care here, today, and emphasizing patient-centered care, we focused our efforts on (i) innovation, (ii) continued professional development, and (iii) scholarship, all of which are described in the following pages.

In its first year, the Center hosted: 499 individual simulation events; 16,430 learner encounters; 22,721 contact hours.
240 medical students participated in Residency Essentials over a weeklong period.

2019: A Year of Progress

This past year, the UTSW Simulation Center demonstrated its ability to develop, implement, and facilitate simulation education for different learner groups in a variety of disciplines. The Center’s offerings involved a range of different simulation modalities, including:

- Procedural-based sessions, such as suturing, central venous line insertion, airway management, and ultrasound
- Scenario-based simulations focused on domains such as team dynamics, professionalism, communication, handovers, and crisis resource management

The Center hosted medical student sessions, including the new Residency Essentials course. This multifaceted program was designed to prepare medical students for their first year of residency. Students participated in core sessions that focused on skills such as providing effective handoffs, completing proper medical diagnoses, airway management skills, intravenous catheter placement, and proper donning of personal protective equipment.

Other offerings such as high-stakes simulated patient encounters, where learners were objectively assessed on criteria while interacting with an expertly trained simulated patient

Percentage breakdown of learner groups

<table>
<thead>
<tr>
<th>Medical students</th>
<th>Allied health professions students</th>
<th>Residents and fellows</th>
<th>Practicing physicians</th>
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<tbody>
<tr>
<td>82%</td>
<td>2%</td>
<td>9%</td>
<td>7%</td>
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Three Strategic Domains

Innovation

In 2019, the Simulation Center was honored to be the recipient of D CEO magazine’s Innovation in Education award. This prestigious award highlights the Center’s foundational belief in embracing and encouraging others to find new opportunities and ways to collaborate while staying on the cutting edge of emerging technology. Additionally, the Center offered the first-ever simulation grant for interested educators to develop new, innovative ways to incorporate simulation throughout UTSW.

Continuing Professional Development

Our focus on continuing professional development yielded great dividends, resulting in 14 continuing education courses, serving 300 learners. These endeavors included a simulation instructor development series, partnerships with industry, and two especially noteworthy initiatives:

Sim101 | Our immersive instructor development series brought together more than two dozen passionate simulation educators to learn. This course offered a group of interprofessional participants different ways to engage with the UTSW simulation community while learning best practices in simulation and how to develop, implement, and facilitate a scenario— all while receiving expert mentorship throughout the process. This esteemed course is taught by nationally renowned simulation faculty members Jessica Hernandez, M.D., and Aditee Parag Ambadkar, M.D.

These efforts supported the success of: 30 three-dimensional printed models, 13 peer-reviewed publications, awarding of the inaugural Simulation Innovation grant.
Simulation-Based Quality Improvement and Research Forum: 207 attended, 13 oral and 15 poster presentations, 4 concurrent experiential learning tracks provided

Continuing Education
The Simulation Center is committed to providing continuing education courses in partnership with the Office of Continuing Education. This includes hosting novel courses for learners nationwide. A sampling of these courses in 2019 included:

- Extracorporeal Life Support, which hosted 29 learners, 21 of which were physicians
- Maintenance of Certification in Anesthesiology program, which hosted 10 courses throughout the year, providing education for 55 anesthesiologists based nationwide
- Vendor-Sponsored Robotic Hernia Course, which hosted eight surgeons

Scholarship

<table>
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<th>Scholars</th>
<th>Activity</th>
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<tr>
<td>Scholarly</td>
<td>The Center participated in interprofessional scholarly activities throughout the year, including podium presentations, presentations at national conferences, and publication of professional papers in more than 10 peer-reviewed journals.</td>
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<td>Research Forum</td>
<td>The Center hosted the second annual Simulation-Based Quality Improvement and Research Forum. This event brought together individuals from a broad array of backgrounds, all with a common interest in health care simulation quality improvement and research. The Center co-sponsored this year’s forum with the UT Southwestern Academy of Teachers. The keynote speakers were Mica Endsley, Ph.D., former Chief Scientist for the U.S. Air Force, who shared her expertise in situational awareness; and Kevin Weiss, M.D., Chief Sponsoring Institutions Officer for ACGME, who shared his expertise on clinical learning environments.</td>
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Simulation Center Staff

- **Daniel Scott**
  M.D., FACS, Director
- **Krystle Campbell**
  M.S., CHSE, Operations Director
- **Deborah Hogg**
  B.S., Manager
- **Mary Kathryn Adcock**
  Administrative Associate
- **Dawnette Adkins**
  Senior Administrative Assistant
- **Kirk Atkinson**
  Simulation Operations Specialist
- **Dante Castro**
  B.A., Standardized Patient Trainer
- **Elizabeth Childs**
  B.A., Supervisor, Standardized Patient Program
- **Rahm Heymann**
  B.S., Clinical Simulation Educator
- **Carla Mosley**
  Program Manager, Standardized Patients
- **Bradley Mueller**
  Education Coordinator
- **Ian Nazarreno**
  Program Coordinator
- **Wesley Witten**
  Standardized Patient Trainer

Simulation Governance Committee

- **Charles Ginsburg**
  M.D., Vice Provost and Senior Associate Dean for Education; Professor of Pediatrics; Marilyn R. Corrigan Distinguished Chair in Pediatric Research
- **Daniel Scott**
  M.D., Assistant Dean, Simulation and Student Integration, Graduate Medical Education, Director, Simulation Center
- **Krystle Campbell**
  M.S., CHSE, Director, Simulation Center Operations
- **Aditee Ambardkar**
  M.D., Associate Professor and Residency Program Director, Department of Anesthesiology and Pain Management
- **Deborah Farr**
  M.D., Director, Surgical Simulation
- **Kim Hoggatt**
  Ph.D., Associate Dean for Academic Affairs, School of Health Professions

Simulation

- **Kimberly Kho**
  M.D., Director of Obstetrics & Gynecology Simulation
- **Joseph Martinez**
  M.D., Director of Emergency Medicine Simulation; Professor of Emergency Medicine
- **Gary Reed**
  M.D., Associate Dean, Quality, Safety, and Outcomes Education
- **Robert Rege**
  M.D., Associate Dean for Undergraduate Medical Education
- **Cameron Slocum**
  Vice President and Chief Operating Officer for Academic Affairs
- **Melanie Sulistio**
  M.D., Associate Dean for Student Affairs
- **James Wagner**
  M.D., Associate Dean for Student Affairs

The UT Southwestern Simulation Center is accredited by these organizations: the American College of Surgeons-Accredited Education Institutes (ACS-AEI) as a Level I Comprehensive Center; the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) as a Fundamentals of Laparoscopic Surgery (FLS) and Fundamentals of Endoscopic Surgery (FES) test center; and the American Society of Anesthesiology as an endorsed center to hold Maintenance of Certification in Anesthesiology (MCCA) courses.