



2020 Annual Report

Delivering on our mission: forging ahead through innovation

Center's Mission | We will provide creative, innovative, simulation-based education and scholarship for UT Southwestern and our community.

A year in review

The UT Southwestern Simulation Center brings the future of health care education to today's students and practitioners. In our second year of operation, our 49,000-square-foot Center continued toward its vision of improving patient care while finding innovative – and primarily virtual – ways to continue to train health care providers, trainees, and students. Our focus remains on providing exceptional

educational offerings for all specialty areas and disciplines.

This year, our Center persevered and pushed the boundaries of ingenuity, bringing to the UT Southwestern campus a new level of integration through tremendous growth in activities for residents, nurses, and allied health professionals. Through partnership with Infection

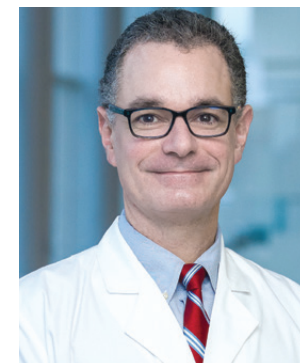
Prevention and Clinical Education & Professional Practice, the Center developed, implemented, and facilitated a campuswide, interprofessional COVID-19 personal protection equipment (PPE) training. We also found innovative ways to use simulation to help trainees overcome limitations in clinical learning during the pandemic's initial wave. As we continue to lead the region in best practice simulation-based

education, our efforts are focused on becoming renowned nationally.

Our strategic framework aligns with UT Southwestern's mission, vision, and strategic goals, including our shared objectives of improving the future of health care and patient-centered care. We continue to focus our efforts on (i) innovation, (ii) continued professional development, and (iii) scholarship.



Daniel Scott – M.D.,
Director



Krystle Campbell – M.S.,
CHSE, Operations Director



In its second year, the Center hosted: 780 individual simulation events; 24,118 learner encounters; 3,837 instructional hours.

800 interprofessional learners participated in COVID-19 PPE training over the months of July, August, and September, with more than 1,000 learners scheduled in subsequent months.



A Review of the Year by Numbers

Throughout 2020, our Center demonstrated its ability to develop, implement, and facilitate campuswide, interprofessional, simulation-based education for a variety of disciplines while facing the new challenges brought on by the pandemic.

The Center offered a variety of simulation modalities, including:

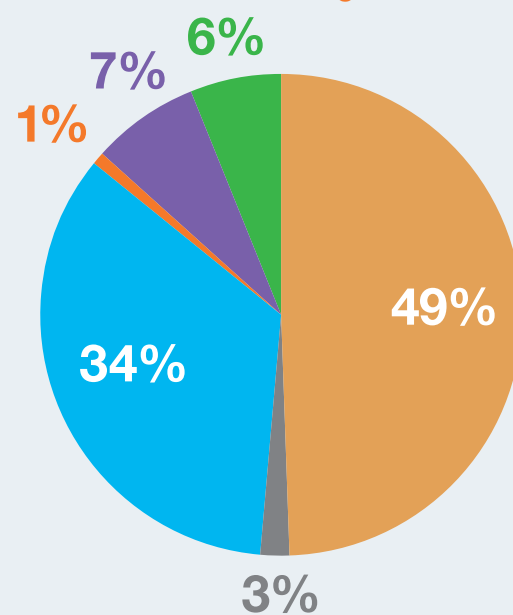
- Procedural-based sessions, such as suturing, central venous line insertion, airway management, and ultrasound
- Scenario-based simulations focused on domains such as team dynamics, professionalism, communication, handovers, and crisis resource management

- Other offerings such as high-stakes simulated patient encounters, in which learners were objectively assessed on criteria while interacting with expertly trained standardized patients

This year, in response to the growing demand for effective PPE training, the Center developed and implemented a campuswide simulation-based initiative. Trainees participated in a blended theory course designed to prepare clinicians, residents, students, and allied health employees to care for patients in the Dallas area, which experienced an expanding population of those who were COVID-19 positive. Learners participated in an online module detailing

Percentage Breakdown of Learner Groups

Medical Students	Interprofessional Activities
School of Health Professions Students	Practicing Physicians
Residents/Fellows	Registered Nurses



effective processes for donning and doffing, workflow changes, and other critical actions and then attended an in-person simulation, where they had an opportunity to apply their newly learned knowledge during hands-on practice.

Strategic Domains

Innovation

Research and Development | To overcome the challenges COVID-19 presented for in-person learning, the Center developed and manufactured take-home suture kits for more than 400 medical students and 60 PA students. These kits came with Center-made suture pads and models, along with instruments and sutures.

Our Center made the most of virtual events in 2020, with 100+ VitalTalk learners and almost 600 participants in our telehealth skills clinics. Meanwhile, to date we've made 400+ take-home suture kits.

Curricula | To supplement emerging technologies and techniques to promote remote learning, our expert simulationists developed new online modules and virtual sessions, including:

- **VitalTalk** – Trainees cultivated communication skills and competencies

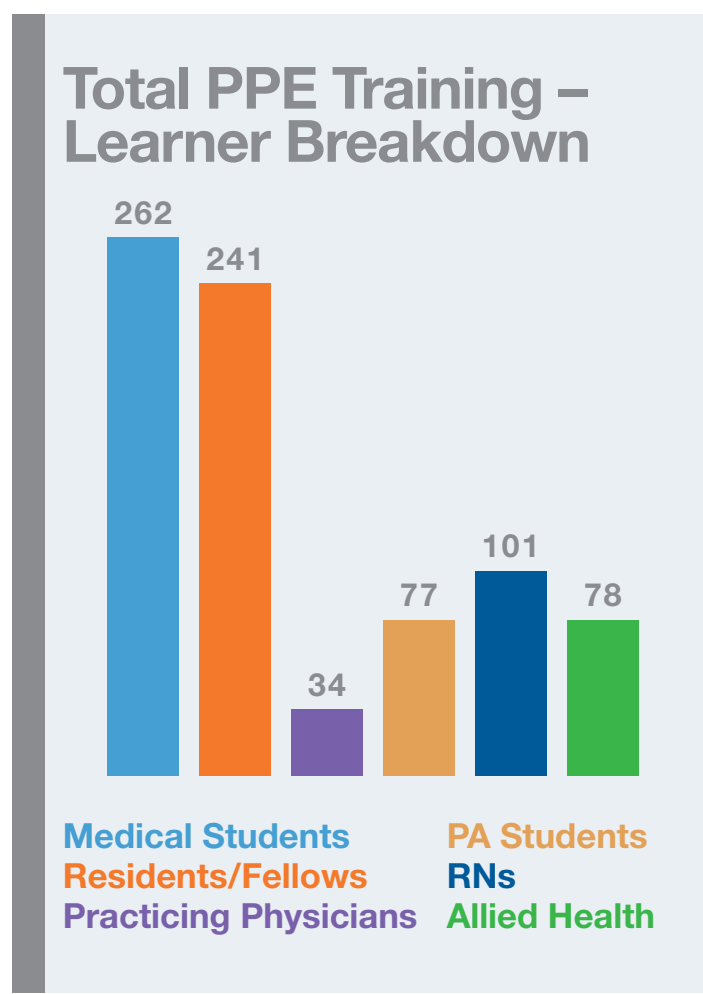
critical for caring for people living with serious illness. Leading this initiative, Dr. Caitlin Siropaides received national recognition for her efforts to train all UTSW second-, third-, and fourth-year medical students, internal medicine residents, palliative care new-hire faculty,

APPs, and fellows via this newly developed virtual program, in partnership with the Center's expertly trained standardized patients.



- **Skills Clinics** – Learners practiced their telehealth communication skills virtually with our expertly trained standardized patients. During this training, learners elicited the symptoms of the simulated patient’s present illness, as well as his or her past medical history, family history, and social history. After collecting the data, the learner offered the simulated patient a differential diagnosis and workup plan. Following the interview, the simulated patient provided feedback to the learner based on a validated checklist.
- **Suturing and Knot-Tying Virtual Sessions** – Trainees partook in master learning sessions in which proper knot-

tying and suturing skills were demonstrated via online instructional videos, followed by the opportunity to attend virtual synchronous sessions with experts in surgery, including Center Director Dr. Daniel Scott. Afterward, students practiced their abilities to reach a level of prescribed proficiency in knot tying. Once they had self-perceived confidence in the art, they submitted a video in which they performed the newly learned skill for expert review and feedback.



Continuing Professional Development

Campuswide Personal Protection Equipment Training | This course provided an experiential opportunity for interprofessional learners to feel comfortable and confident in their ability to safely protect themselves, their colleagues, and their patients while caring for COVID-19 patients. Over the course of three months, this training ensured that all learners could follow the correct order of the application and removal of PPE. Participants also learned other critical job-specific processes. The course, which fostered new partnerships with campus experts in the fields of nursing education, infection

Nearly 200 people from over 70 institutions took part in the virtual Research Forum, joining from as far away as Lisbon, Portugal. Interactive presentations included 13 speakers and 26 posters on a range of simulation topics.

prevention, and allied health, provided those interested with 2.0 AMA credits. Additionally, the Center continues to be committed to providing continuing education courses in partnership with the Office of Continuing Medical Education, which includes hosting novel courses for learners nationwide. A sampling of these courses in 2020 included:

- Blended Theory-based Simulation 101, which teaches interested instructors how to effectively integrate simulation into their curricula through modules including curricula development, simulation facilitation, and debriefing.

Scholarship

The Center participated in more than 10 interprofessional scholarly activities throughout the year, including podium presentations, presentations at national conferences, and acceptance of professional papers in peer-reviewed journals.

Research Forum | In 2020, the Center deployed a multitude of creative ideas and new techniques to continue the delivery of high-quality, simulation-based education while

facing a global pandemic. A good example of this innovation was the Center's hosting of the third annual Simulation-Based Quality Improvement and Research Forum using virtual conferencing technology on May 13.

Simulation Innovation Awards | This year, the Center was excited to award two applicants the prestigious Simulation Innovation Award funding. These two awardees submitted meaningful proposals, which will advance the quality of care and of education at UTSW and in the region.

Awardee 1: Rapid Cycle Crisis Resource Management: Improving Resident Acute Care Management

PI: Blake Nichols, M.D.*

Mentor: Aditee Ambardekar, M.D.**

*Department of Pediatrics, UT Southwestern Medical Center

**Department of Anesthesiology and Pain Management, UT Southwestern Medical Center

Awardee 2: Improving Postpartum Contraceptive Counseling; Utilizing Medical Students as Educators Following Implementation of a Simulation-based Curriculum

PI: Shena Dillon, M.D.*

Mentor: Catherin Y. Spong, M.D.*

*Department of Obstetrics and Gynecology, UT Southwestern Medical Center

Simulation Center Staff

Daniel Scott
M.D., Director

Krystle Campbell
M.S., CHSE
Operations Director

Carla Mosley
Manager, Standardized Patients

Deborah Hogg
MBA, Manager of High-Fidelity Simulation

Mary Kathryn Adcock
Administrative Associate

Dawnette Adkins
Program Coordinator

Kirk Atkinson
Simulation Operations Specialist

Dante Castro
B.A., Standardized Patient Trainer

Elizabeth Childs
B.A., Supervisor

Rahm Heymann
B.S., Simulation Educator, Senior

Bradley Mueller
Education Coordinator

Ian Nazarreno
B.A., Program Coordinator

Monique Ridge
Education Technology Specialist

Tina Tran
B.S., Financial Analyst II

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 Ambardekar
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

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 for 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; Director of Quality Improvement, Simulation Center

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 (MOCA) courses.

UTSouthwestern
Simulation Center

2001 Inwood Road

Dallas, Texas 75390-9092

Phone: 214-648-9000

utsouthwestern.edu/departments/simulation-center