



NYSIM

THE CITY UNIVERSITY OF NEW YORK | NYU GROSSMAN SCHOOL OF MEDICINE

ANNUAL REPORT 2020-2021

Celebrating 10 Years
of Simulation Education, Innovation, and Resilience



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MESSAGE FROM THE
**ASSISTANT DEAN OF
SIMULATION EDUCATION**



In May of 2020, I joined the New York Simulation Center for the Health Sciences (NYSIM) as the Assistant Dean of Simulation Education. Despite the challenges at the beginning of the pandemic, I could not have been more excited and happy to join the team at NYSIM and lead us through the last two years. When NYSIM first opened in 2010, my role was to develop and implement Objective Structured Clinical Examinations (OSCE) in the Department of Orthopedic Surgery. As my department developed more simulation programs, the value of simulation for learners at all levels was clear. In medical school, then in General surgery and finally in Orthopedic surgery residency, we did not have access to simulation to learn and practice skills before taking care of patients. Simulation builds confidence and develops the technical and communication skills needed to provide safe, high-quality patient care. The entire team at NYSIM firmly believes that simulation effectively improves patient outcomes in the clinical setting, and we are committed to supporting innovative, effective programs.

The culture of appreciation, respect, clear communication, and teamwork are evident throughout NYSIM, whether staff are supporting programs, engaging in virtual team meetings, or in casual conversation. It is that culture that has resulted in the accomplishments included in this report, showing resilience, innovation, and creativity to continue supporting programs even during the pandemic, leadership changes, and other disruptive events. Team members are truly collaborative, sharing ideas and expertise, with the expectation that anyone can speak up, be heard, and have ideas respected and appreciated. This is exactly what our team anticipates simulation will promote to enhance our clinical learning environment.

The culture and practices we are imparting to learners across NYU Grossman School of Medicine (NYUGSOM) and The City University of New York (CUNY) to improve patient care are demonstrated in the work at NYSIM. It is not just about teaching and practicing skills. It is learning how to work together effectively to deliver safe and high-quality patient care, regardless of level of training, specialty, or discipline. The NYSIM team members consistently model the principles and behaviors that have been shown to create a supportive and psychologically safe work environment.

The culture of the center is unique and special. Every time the elevator doors opened, anyone coming to NYSIM is likely to notice something unique: there is a sense of calm, warmth, and a welcoming environment created by the entire team. Nearly two years into my leadership role, that sense of inclusion continues.

When I started in my new role at NYSIM, I was told by Dr. Thomas Riles, NYSIM's founding director, that "it is a fun job". He was absolutely right, and that is because of the team we work with and the culture of NYSIM. It has been the joy of my long career to build upon the solid foundation that Dr. Riles established and led over many years and work with the dedicated directors and staff of NYSIM.

DONNA P. PHILLIPS, MD

Assistant Dean of Simulation Education

MESSAGE FROM THE
**ADMINISTRATIVE
DIRECTOR**



The New York Simulation Center for the Health Sciences has provided world-class simulation education to thousands of CUNY and NYUGSOM learners across disciplines and specialties for the last 10 years. Dr. Thomas Riles and Joanne Choi, Senior Administrative Director of NYSIM for 8.5 years, built a sound infrastructure to support the center's rapid growth, and cemented NYSIM as a business and educational model for other centers through creative ideas and implementation.

In January of 2020, I joined NYSIM as Assistant Director of Operations. From my first day, it was clear that every team member valued the important work they were doing and valued one another. Two months into my role, the pandemic happened. Joanne Choi, and the entire team, demonstrated great agility, resiliency, and innovation to successfully pivot programs and adapt operations to ensure everyone's safety, without compromising the learning. It was at this same time that Dr. Donna Phillips started her role as the Assistant Dean of Simulation Education and joined with Ms. Choi to lead NYSIM, each adapting to the changes in leadership and the pandemic. Behind the scenes, through small and large meaningful gestures, the team rallied to support one another during those uncertain times and continue to do so. It is this enduring commitment to excellence and care for one another that makes NYSIM so unique and special.

In March of 2021, Joanne Choi transitioned to another position within NYU Grossman School of Medicine and I moved into the Administrative Director role. It has been a year filled with many transitions and I am honored and excited to partner with Dr. Phillips and my colleagues at NYSIM to build upon the incredible legacy of Dr. Riles and Ms. Choi. Together, we will expand NYSIM's reach and impact, elevate simulation education through innovation, improve operational efficiencies, leverage state of the art technology and equipment, and promote a culture of inclusivity and engagement to create a positive and effective work and learning environment for everyone who steps through our doors, both physical and virtual!

KATIE E. TAME, MS, CPXP

Administrative Director



MISSION, VISION, AND GUIDING PRINCIPLES

MISSION

The mission of NYSIM is to provide simulation education and research that fosters quality care, patient safety, and effective communication with patients and among health care professionals.

VISION

NYSIM will be the hub of simulation education in the health sciences at CUNY & NYU Grossman School of Medicine and through its simulation education and research, will improve health outcomes, equity, and safety.

GUIDING PRINCIPLES

We will:

1. Expand NYSIM accessibility for all learners
2. Assess educational and health outcomes through research and data analysis
3. Cultivate a culture of continuous improvement in our educational programs focusing on quality, safety, and research
4. Continue education consultations to ensure high quality simulation activities across disciplines
5. Model teamwork, communications, respect, kindness, diversity, excellence, and collaboration throughout NYSIM to create a safe, non-judgmental learning environment
6. Increase our visibility locally, nationally, and globally

STEERING COMMITTEE

The New York Simulation Center for the Health Sciences is governed by the NYSIM Steering Committee, composed of two representatives from The City University of New York (CUNY) and two representatives from the NYU Grossman School of Medicine (NYUGSOM).



Steven Abramson, MD
Sr. Vice President and Vice
Dean for Education, Faculty and
Academic Affairs
NYU Grossman School of Medicine



Patricia Simino Boyce, PhD, RN
University Dean for Health and
Human Services
The City University of New York



Kirk N. Lawson, MBA
Associate Dean for Academic
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Academic Affairs
NYU Grossman School of Medicine



Robert T. Maruca
Associate University Provost
for Planning
The City University of New York

NYSIM STAFF

NYSIM LEADERSHIP

Donna P. Phillips, MD

Assistant Dean of Simulation Education

Sondra Zabar, MD

Director of SP Programs

Jeff Manko, MD

Director

Grace Ng, PhD, RN

Director of Health Professions

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Administrative Director

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John Kang

Simulation Operations Associate

Branden Ford

Per Diem SOA

Errol Ansalone

Per Diem SOA

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Standardized Participant Educator

Sean Overstreet

Simulation Operations Associate

Alex Mack

Per Diem SOA

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BLS, ACLS, PALS Faculty

Dennis Heon, MD

PALS Faculty

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Trainer

Candice Perez-Milline, NREMTp

Per Diem Trainer

Don Faeth, EMTp, CIC

Per Diem Trainer

JOINT PROGRAMS

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Program Manager

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Per Diem Web Designer

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Matron

ACKNOWLEDGEMENTS

NYSIM would like to thank former employees for their contributions to our success in 2020-2021.

Danny Lugassy, MD

Joanne Choi, MPH

Soma Roy

Emery Olson

Erin Mills, LMSW

Maria Olivero

EXECUTIVE SUMMARY

CELEBRATING 10 YEARS OF SIMULATION EDUCATION, INNOVATION, AND RESILIENCE

HISTORY

Following the September 11, 2001 attacks, The City University of New York's (CUNY) Borough of Manhattan Community College (BMCC) received a large grant to create an emergency preparedness training center. In 2007, the newly appointed Dean and CEO of NYU Langone Medical Center, Dr. Robert I. Grossman, commissioned a committee to address the need for a simulation facility for the medical center. Chaired by Dr. Thomas S. Riles, the committee included faculty members from the NYU School of Medicine, Tisch Hospital administrators, and representatives from the NYU Schools of Nursing and Dentistry. In 2008, the partnership with CUNY was formed and plans to construct the New York Simulation Center for the Health Sciences (NYSIM) began. Construction of the center on the 3rd floor of Bellevue Hospital commenced in 2010.

NYSIM officially opened its doors on September 6, 2011, ten years after the catastrophic events of 9/11. On opening day, 48 NYU medical students participated in a Practice of Medicine (POM) Objective Structured Clinical Examination (OSCE) and 5 NYU medical students participated in an Emergency Medicine Clerkship Ultrasound simulation. Ten days later, CUNY students from the Borough of Manhattan Community College Paramedic program came to NYSIM for their first simulation-based education program. From the moment we opened our doors, staff, faculty, directors, and leaders from both The City University of New York (CUNY) and NYU Grossman School of Medicine (NYUGSOM) have contributed to NYSIM's ongoing growth and success, ensuring learners and health professionals are provided with exceptional learning experiences.

Over the last 10 years, NYSIM celebrated milestones and accomplishments as well as faced unprecedented challenges with great agility and creativity.

CONSTRUCTION, BEFORE AND AFTER



TIMELINE

2011 September 6

NYSIM opened its doors.

2012 August

Within our first year of operations, NYSIM hosted 685 sessions with a total of 10,007 learners.

October 29 – Hurricane Sandy

Bellevue Hospital sustained significant damage from Hurricane Sandy and was shut down, temporarily displacing NYSIM. Joanne Choi, Administrative Director, quickly mobilized team members to map operations and educational needs, referred to as the “100 Steps of an OSCE.” Armed with flashlights, a small number of staff were permitted to enter Bellevue for a few hours and moved essential equipment to a temporary facility six blocks away. After tireless collaboration between departments and teams, NYSIM was then able to transform offices at 577 First Avenue into exam rooms and simulation spaces which were successfully used for educational programs until Bellevue re-opened.

2013 February 12

NYSIM operations returned to our space at Bellevue Hospital.

October 11

NYSIM hosted our inaugural Hot Topics in Simulation Education Symposium featuring experts in simulation, with plenary sessions and workshops focused on innovation and sharing best practices. Since its inception, 680 people have attended Hot Topics.

November 19

NYSIM hosted our first NYSIM Instructor Course (NIC) to teach new and intermediate simulation instructors effective debriefing and scenario design. NYSIM offers this professional development course regularly throughout the year, and to date 646 learners have participated in the program.

2014 July

NYSIM refreshed our logo.



2015 July

NYSIM celebrated 50,000 learners having participated in simulation education, and hosted a community “thank you” event in commemoration on July 23, 2015.

2017 June 26-27

NYSIM hosted our inaugural annual First Night On-Call (FNOC), an immersive quality and safety orientation for all incoming NYULH interns. FNOC incorporates standardized participants, task trainers, and manikin based simulation. Since 2017, FNOC has hosted more than 900 interns. From the first day of training, interns are introduced to institutional priorities and values to provide highly reliable care to all patients.

2018 August

NYSIM celebrated 100,000 learners having participated in simulation education.

2019 May

NYSIM transitioned to a new learning management system, Laerdal SimCapture Enterprise (B-Line), to improve stability, enhance user experience, streamline learner assessments, and offer more robust data management.

2020 February 1

NYSIM installed center sign-in kiosks, allowing us to manage all learner attendance digitally, streamline data collection, and reduce waste from the former paper sign in process.



Spring

NYSIM rose to the challenges of continuing simulation education throughout the COVID-19 pandemic. Leaders and staff responded by establishing workgroups for piloting and mastering distance simulations as well as developing and implementing remote OSCE programs. NYSIM has remained open throughout the pandemic, meeting the needs of learners for simulation education to enhance patient safety.



April 3

131 attendees virtually participated in the first CUNY-NYSIM Simulation Summit with keynotes and workshops focused on simulation education at CUNY.

May 1

NYSIM welcomed our new leader Donna Phillips, MD as Assistant Dean of Simulation Education. Dr. Phillips is working toward integrating simulation into all levels of education across the NYU Grossman School of Medicine and the City University of New York to improve healthcare quality, safety and patient experience.

May 5

NYSIM supported our first distance simulation: Gastroenterology's Clinical Practice of Medicine for NYU Grossman School of Medicine students.

June 23

NYSIM supported our first remote Standardized Participant (SP) program: Transgender Health Group Objective Structured Teaching Encounter (GOSTE) for NYULH's Emergency Medicine residents.

September 28

NYSIM supported the first remote CUNY-HHS Interprofessional Education SIM program session. The program, developed by Dr. Patricia Simino Boyce and Dr. Grace Ng, held 91 remote sessions through December 2021 and has provided invaluable IPE education to many learners across CUNY schools and disciplines.

October 30

NYSIM hosted our first Hot Topics Symposium on a virtual platform. 152 participants from CUNY, NYUGSOM, and external institutions attended the symposium.

December 11

63 participants attended the inaugural Annual NYSIM-CUNY Sim-Interprofessional Education (IPE) Summit focused on interprofessional simulation education at CUNY on a virtual platform.

2021 September 6

NYSIM Celebrates 10 Years of Simulation Education, Innovation and Resilience.

10 YEARS OF SERVICE

Below you will hear from three team members who have been supporting NYSIM from the beginning, and learn about their unique role and how NYSIM has evolved over the years. We are grateful for the countless ways they have individually and collectively contributed to NYSIM's growth, culture and quality of programs and operations.



Sondra Zabar, MD, Director of Standardized Participant Programs

Q: Given that you've built and grown the SP program over the past 10 years, what are you most proud of?

A: "I am most proud that we at NYSIM created a "home" for our standardized participant simulation that has continued to grow and innovate over the last 10 years. Through our multi-department and multidiscipline collaboration, we have also launched faculty's careers in medical education scholarship and trained the future generations of health professionals."



Ginny Drda, SP Educator

Q: Give us a look into SP training—what is it like collaborating with faculty and the actors to get the portrayal just right?

A: "It is always exciting to collaborate with faculty and standardized participants on the evolution of a case! We co-develop the physical and emotional aspects to reflect real patient encounters, and coach the SPs to enact realistic portrayals. Fine-tuning these aspects to simulate genuine patient experiences is so meaningful. Knowing that it enhances learning inspires my work each day."



Tom Vongbandith, Senior Systems Analyst

Q: Thinking about when the center opened vs. now, what advancement in technology has been most impactful for NYSIM?

A: "One of the most impactful implementations of technology at the center was the transition to our new learning management system, Laerdal SimCapture Enterprise (also known as B-Line). Our new LMS allowed us to improve the way we collected data more accurately for capturing the activities of our participants at the center, while also optimizing our front reception's operational workflow to become more efficient. Part of this transition has also allowed us to streamline new methods to enhance our data collection in order to improve the delivery of these reports to our leadership and stakeholders at NYSIM."



HONORING THE PAST AND A VISION FOR THE FUTURE

“From its beginnings in 2011, NYSIM was destined to be one of the foremost simulation centers in the world. With unbridled support from two major universities, innovative design, visionary programming and a dedicated staff, NYSIM has been a model for scores of others. Now, after over 150,000 learner visits, simulation has become an integral component of the educational programs of the NYU Grossman School of Medicine, the NYU Langone Medical Center and the City University of New York health professions colleges. As we embark on the next decade, I am confident NYSIM will continue to be transformative in how we train and assess the next generation of health care professionals.” - Thomas Riles, MD, NYSIM Founder and former Executive Director

“The NYSIM overarching vision is to be the hub of simulation education for the health sciences to improve outcomes, equity, and safety. There is, clearly, a solid foundation at NYSIM as we continue to expand and enhance simulation education. We are making progress toward our goals: 1) expanding interprofessional education, 2) studying outcomes in the workplace to demonstrate our impact on patient care, 3) expanding our research and publications to further increase our national presence, and 4) demonstrating for each and every learner how to improve confidence and skills. The NYUGSOM medical student curricular redesign is perfectly timed to reach our goals by weaving simulation into the new curriculum. Similarly, our CUNY partners are engaged in expanded programs, faculty development, interprofessional education, and expanded collaboration. As we grow our leadership team, the next ten years will bring further innovation, engagement, and contribution to the delivery of highly reliable and safe patient care across all disciplines and specialties.” - Donna P. Phillips, MD, NYSIM Assistant Dean of Simulation Education



The vision and foresight of founding leaders and collaborators led to the successful partnership between CUNY and NYUGSOM. We thank Dean Robert I. Grossman MD, Dr. Steven Abramson, Dr. Thomas Riles, Dr. Antonio Perez, Dr. Andrew Brotman, Richard Donoghue, Iris Weinshall, Sheila O'Loughlin, Judy Bergtraum, Dr. Julia Wrigley, Dr. Demian Szyld, Dana Sunshine, Dr. Sondra Zabar, and Dr. Grace Ng for their foresight and collaboration that has resulted in NYSIM's success.

We want to extend our heartfelt and deep appreciation to:

- Dr. Sondra Zabar for building SP educational programs from the very beginning and always pursuing academic excellence.
- Dr. Grace Ng and Dr. Danny Lugassy for developing the NYSIM Instructor Course (NIC), and educating participants on how to effectively develop and teach high-quality simulation programs.
- Dr. Grace Ng for her close collaboration with CUNY and providing invaluable mentorship to faculty.
- Joanne Choi, former Senior Administrative Director, for her effective leadership and immeasurable contributions to the center's growth.
- Dr. Bonne August, Richard Donoghue, Dr. Antonio Perez, Judy Bergtraum, Dr. William Ebenstein, and Dr. Julia Wrigley, former Steering Committee members, for their significant service and support to NYSIM.
- Dr. Steven Abramson, Dr. Patricia Simino-Boyce, Bob Maruca, and Kirk Lawson, current Steering Committee members, for their dedication and guidance.

We are grateful for the vision of Dr. Donna P. Phillips, Assistant Dean of Simulation Education, who is committed to innovation, and growing and developing simulation education to enhance outcomes in patient care, quality and safety.

We extend a special thank you to our staff over the years for their dedication to excellence and resilience during challenging times, as well as to our partners who have helped us reach this 10-year milestone. We look forward to continued and expanded use of simulation education, innovation, and service to CUNY and NYUGSOM in the years to come.



RESPONSE TO COVID-19

PAST AND FUTURE



A SAFE LEARNING ENVIRONMENT

NYSIM has been committed to supporting safe operations for all learners, faculty and staff, and we have all implemented and learned safe practices that align with the clinical environment. Operational changes allowed NYSIM to keep our doors open and provide the safest learning environment for our community. At the onset of the pandemic, we made changes to the physical environment to prevent crowding. Individuals entering NYSIM are asked to use hand sanitizer, wear surgical masks at all times, and practice social distancing when possible. No food or drink is permitted at NYSIM, ensuring that masks are worn consistently. Signage is posted throughout the center to remind everyone to follow these important safety guidelines. We regularly revisit guidelines and adjust them in response to COVID-19, and will always prioritize establishing NYSIM as an optimal and safe learning environment for all learners, faculty, and staff.

DISTANCE SIMULATION: SIMULATION IN THE VIRTUAL ENVIRONMENT

The COVID-19 pandemic suddenly prevented many of our learners, instructors, and staff from participating in on-site, in-person simulations and Objective Structured Clinical Examinations (OSCE) at NYSIM. In response, NYSIM focused on expanding our range of services to include distance simulations in which learners, instructors, and simulation staff participate virtually, using web conferencing platforms to enable all parties to interact with each other during either manikin-based simulations or OSCEs. Distance simulation continues to be an option and is often referred to as telesimulation, remote simulation/OSCE, or virtual simulation/OSCE. Although we were able to return to supporting programs on-site throughout the pandemic, we will continue to offer this modality for convenience and a seamless, positive experience for learners and faculty.

SUPPORTING COVID-19 PATIENT CARE

In the early months of the COVID-19 pandemic, there was real concern about availability of equipment for patient care. NYSIM quickly mobilized to loan equipment to NYU Langone Health in support of patient care efforts, including:

- Partnering with NYULH's Clinical Engineering Department to prepare NYSIM's ventilators for clinical use by Tisch Hospital to assist with critical care. This collaboration helped numerous patients receive the respiratory care needed during COVID-19.
- Loaning a manikin to Tisch Hospital's Medicine Unit which provided clinicians with a safe way to practice pronation on the unit.
- Providing NYUGSOM's Emergency Medicine Department with a Glidescope and an Adult Airway Head to facilitate additional training in intubation techniques on the unit.

EARLY GRADUATE TRAINING AND CLERKSHIP RE-ORIENTATION: NYSIM MEETING THE UNIQUE NEEDS OF STUDENTS

In April 2020, NYU Grossman School of Medicine became the first medical school in the United States to invite fourth-year medical students (MS4s) to graduate early to assist in the treatment of coronavirus patients. NYSIM leadership provided a one-week orientation for the fifty-two medical students who volunteered to take on the important role of junior physician. The overall aim of the orientation was to help the junior physicians gain key knowledge and skills to navigate the unique challenges presented by COVID-19. The orientation was a blend of in-person and online learning, and included team-based simulations, Heartcode ACLS and BLS courses, PPE (Personal Protective Equipment) donning and doffing, use of structured handoffs for safe transfer of patient care (IPASS), and resources for emotional & psychological well-being during COVID-19.

NYSIM leadership and the NYUGSOM Office of Medical Education facilitated a two-day clerkship re-orientation for returning clerkship students adapted for the COVID-19 era. This re-orientation provided 100 third year medical students with experiential education at NYSIM to learn and practice proper donning/doffing of PPE techniques, and reviewed universal safety and High Reliability Organization principles and practices. The response from NYSIM and the Office of Medical Education (OME) leadership to prepare medical students for clinical duties during these unprecedented times was swift and highly collaborative.

NATIONAL CERTIFICATION COURSES

NYSIM's National Certification Courses (NCC) program runs daily providing BLS, ACLS and PALS certifications. After closing for just two weeks to make necessary operational adjustments, our team returned on-site to provide mission-critical training and continued to do so safely throughout the pandemic.

WELLNESS HOUR

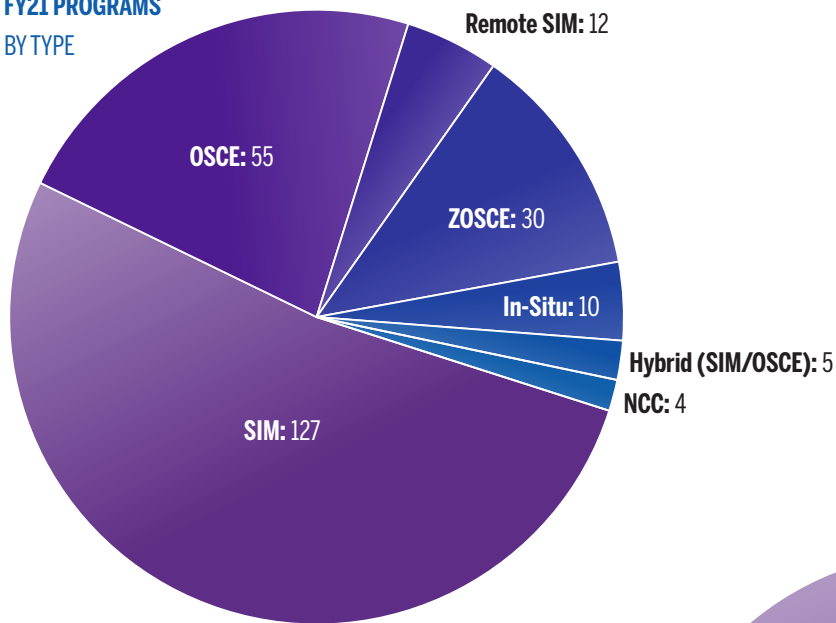
To help staff cope during the height of the pandemic, NYSIM implemented a daily wellness hour to foster community, connection, and resilience and to provide time for staff to decompress from the physical and mental burdens of COVID-19. NYSIM staff used this time to focus on health and well-being for themselves and others, sharing yoga and mindfulness resources, and using the time to check in with their colleagues and loved ones. NYSIM's SP Educator, Ginny Drda, led two Narrative Medicine Workshops using poetry and visual art to foster dialogue, self-reflection, and appreciation for each other's lived experiences. Emery Olson, former NYSIM Administrative Coordinator, published a weekly digital "Good News Newsletter" for staff featuring fun facts and stories, including photos with pets and favorite recipes. One team member wrote, "...NYSIM's Wellness Hour made a huge difference for me personally. It encouraged and validated the importance of self-care, especially during an extremely stressful time."

NYSIM FY21 UTILIZATION AND IMPACT

In the last fiscal year,
16,316 learners and faculty participated in simulation education activities.
388 programs and
1954 sessions took place totaling
5,467 hours of instruction

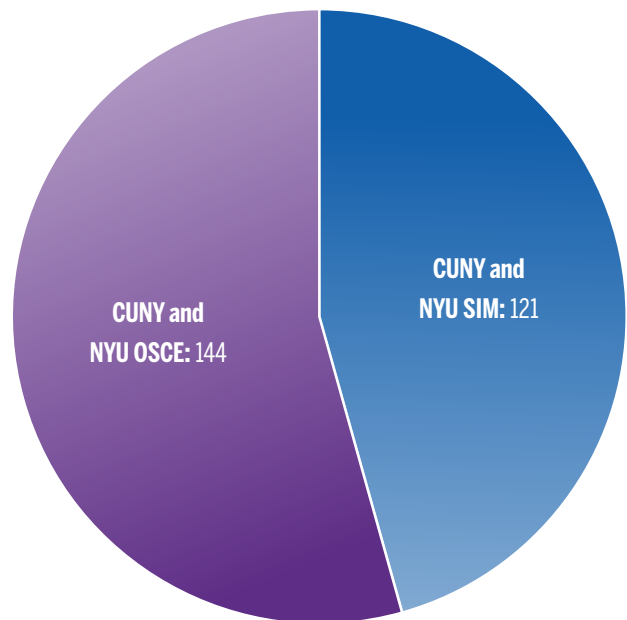
FY21 PROGRAMS

BY TYPE



FY21 CUNY AND NYU GROSSSMAN MEDICAL STUDENT SESSIONS

CUNY School of Medicine and NYU Grossman School of Medicine conducted 144 OSCE and 121 simulation sessions for their medical students.



DATA KEY

Sessions: each instance of an education program is considered a session.

Program Type:

- SIM Programs: simulation programs using task trainers or manikins
- Remote SIM: simulation programs held virtually
- OSCE: programs using Standardized Participants (SP)
- ZOSCE: OSCE programs held virtually (Zoom-OSCE)
- Hybrid (SIM/OSCE): courses involving both SIM and OSCE components
- In-Situ: programs occurring in a clinical setting
- NCC: National Certification Courses, including the American Heart Association's BLS, ACLS, and PALS

Who are our Learners?

Our learners represent a multitude of health professions disciplines including:

- Medical students
- Nursing students
- Physician assistants
- Physical therapists
- Residents
- Attending physicians
- Nurses
- Medical assistants
- Emt's and paramedics
- Nutritionists
- Social workers, and many more

*The utilization data reflects CUNY, NYULH programs and National Certification Courses (BLS, PALS, ACLS).



EDUCATION CONSULTS

NYSIM directors provide faculty development for new and existing simulation education programs through formal education consults. A total of 53 education consult meetings occurred between implementation in December 2020 and August 2021. Topics included: scenario design, program structure, task trainer and simulator training, resources and best practices in simulation education, scholarship, and SP case development.

NYSIM FY21 PROGRAMS AT A GLANCE

SIMULATION (SIM) PROGRAM

NYSIM's Simulation (SIM) Program includes 25 high-fidelity manikins and more than 200 task trainers. Learners practice communication skills, teamwork, technical and clinical decision-making skills in a psychologically safe, simulated environment that replicates a clinical setting. Programs are developed and supported by the simulation team, including the NYSIM Directors and Simulation Operations Associates (SOA). Simulated clinical scenarios can be delivered on-site at NYSIM, in a healthcare setting, or through a remote platform.

Accomplishments:

- Supported 742 simulation sessions.
- Supported new programs, including:
 - LaGuardia Community College EMT Neonatal & Childbirth Simulation
 - NYU Brooklyn Pediatric Vascular Access Simulation
 - Fundamentals of Critical Care Support (FCCS) course remote simulation, in partnership with the Greater New York Health Association (GNYHA)
- Supported 61 CUNY Interprofessional Education SIM sessions virtually featuring the following topics:
 - Community Health
 - Discharge Planning
 - Inpatient
 - TeamSTEPPS
 - Public Health
 - Substance Use (pilot)
- Provided creative solutions to enhance the fidelity of simulations, including:
 - Packaged non-sterile gloves to replicate sterile gloves for a large program, resulting in considerable cost savings
 - Created blood clots and developed techniques to have the clots passed at a realistic time for a maternal hemorrhage simulation
- Expanded our educational equipment portfolio to meet the evolving learning needs of our community. In collaboration with faculty educators, we tested equipment and acquired realistic foley catheterization task trainers, tracheostomy care manikins, assistive devices, lactation simulation models, pressure injury and wound care models, knee and shoulder ultrasound and injection model trainers, and an ultrasound guided pericardiocentesis trainer. One of our most significant acquisitions is the Automatic Delivery Module (ADM) that pairs with the SimMom manikin and allows for automated simulated delivery scenarios.





STANDARDIZED PARTICIPANT PROGRAM

NYSIM's Standardized Participant (SP) Program runs and supports Objective Structured Clinical Examinations (OSCE) throughout the year on-site at our center, remotely, and in a hybrid model. Our SPs portray a wide variety of cases and roles, including patients, family members, learners, and healthcare professionals in OSCE's and manikin-based SIM programs. They are skilled in assessing and delivering feedback. NYSIM has 14 patient care rooms that realistically replicate an examination room where learners can interact with "patients"; learn communication skills, hone their history-taking and physical examination skills, and practice difficult conversations in a psychologically safe environment.

Accomplishments:

- NYSIM supported 98 Standardized Participant programs with a total of 247 sessions.
- In addition, 12 additional SP programs were held across the institution with SP's participating in a total of 138 sessions.
- 141 Standardized Participants (SPs) employed by NYSIM contributed 9,860 hours for all programs
- NYSIM SP Educator conducted 44 SP trainings.
- Collaborated with faculty to write new scenarios, including:
 - First Counseling Visit and Intake scenario for the CUNY College of Staten Island Mental Health ZOSCE
 - Managing a Patient with Pneumonia scenario for the CUNY Queensborough Community College Safe and Effective Nursing Care Level I OSCE
 - Vaccine Hesitancy scenario for the NYULH Graduate Medical Education Internal Medicine Resident OSCE
 - Providing Teleneurology and Supporting a Struggling Colleague scenarios for NYULH Neurology Faculty ZOSCE
- Supported 33 new programs, including:
 - CUNY School of Medicine Night On Call
 - CUNY College of Staten Island Mental Health Counseling OSCE
 - NYU Grossman School of Medicine medical student ICI 2 (Inter-Clerkship Intensive) Autism Workshop
 - NYU Grossman School of Medicine OBGYN Fellowship REI (Reproductive Endocrinology and Infertility) OSCE
- Maintained a pool of approximately 141 standardized participants, with a diverse range of ages, gender identities, races, ethnicities, and foreign language speakers to ensure our SP pool reflects our patient population.
- Used technology to reach more learners via Zoom OSCEs (ZOSCEs). This program type allows us to reach learners who cannot easily access the center or prefer the convenience of remote education.
- Supported hybrid SIM/OSCE programs utilizing both SIM and OSCE components. For example, a high-fidelity manikin and SP were utilized to navigate a highly sensitive and emotionally charged scenario for the Hospice and Palliative Medicine Fellowship. The scenario was designed for learners to complete a palliative extubation while interacting with a standardized family member.



NATIONAL CERTIFICATION COURSES

NYSIM's National Certification Courses (NCC) program has been offering the American Heart Association's Advanced Cardiovascular Life Support (ACLS), Basic Life Support (BLS), and Pediatric Advanced Life Support (PALS) courses to our community of providers since November 2019. The program is a registered training site in partnership with the NYU Long Island School of Medicine (LISOM), AHA Training Center led by Don Wang. We are thankful to all our collaborators for their teamwork.

Accomplishments:

- Educated and certified 4896 learners.
- Successfully redesigned our course scenarios to align with the AHA's 2020 Science Updates, released in October 2020.
- Committed to quality assurance by implementing a total of 15 direct observations of instructors with feedback sessions for instructor development and course improvement.
- Partnered with NYULH Nursing leaders across campuses to offer and expand accessibility to our AHA Heartsaver CPR/AED course, with courses available to accommodate all shifts.
- Successfully trained the new cohort of 375 house staff in collaboration with the NYUGSOM Graduate Medical Education Office (GMEO).

For more information, please visit our website at:

<http://nysimcenter.org/courses/bls>



PROFESSIONAL DEVELOPMENT PROGRAMS

NYSIM INSTRUCTOR COURSE (NIC)

The NYSIM Instructor Course is an immersive experience for new and intermediate simulation instructors from the City University of New York (CUNY) and NYU Langone Health (NYULH). Participants learn how to create novel educational experiences through simulation scenario design and effective debriefing. The course was developed and facilitated by Dr. Grace Ng, former Nursing and Health Professions Director and Dr. Daniel Lugassy, former Medical Director. There were 4 sessions in FY21, with a total of 37 participants from CUNY and NYUGSOM, representing diverse clinical education roles including nurse educators, attending physicians, clinical instructors, GME trainees, and professors.



HOT TOPICS IN SIMULATION EDUCATION SYMPOSIUM: ADAPTATION TO COVID-19

NYSIM hosted the 6th Annual Hot Topics in Simulation Education Symposium virtually on October 30, 2020. This symposium is for educators across health professions to present the latest innovations and best practices in simulation education, with strategies to integrate simulation into curricula and practice. In total, three presenters facilitated informative plenary sessions and six breakout sessions were offered. A total of 152 participants from CUNY, NYUGSOM, and external institutions attended the symposium. To learn more about Hot Topics, and view previous years' plenary sessions, please visit our website: <http://nysimcenter.org/symposium/hot-topics>

CUNY-NYSIM SUMMITS

Twice a year, NYSIM and CUNY collaborate to facilitate a summit for the CUNY Health and Human Services. Under the leadership of Dean Patricia Simino-Boyce, PhD, the summit promotes interest in simulation, celebrates the work of our CUNY faculty, and connects participants with the resources available at NYSIM. The Annual CUNY-NYSIM Simulation Summit is held in the spring semester, and the Annual NYSIM-CUNY Sim-Interprofessional Education (IPE) Summit is held in the fall. For each summit, Dean Simino-Boyce presents on simulation at CUNY, followed by an internationally renowned speaker who delivers a keynote presentation and a workshop. Additionally, CUNY faculty join panels to present their innovative work related to simulation. The Fiscal Year 2021 summits included a total of 139 participants representing 14 CUNY campuses.



SCHOLARLY CONTRIBUTIONS

PUBLICATIONS

Wilhite JA, Fisher H, Altshuler L, Cannell E, Hardowar K, Hanley K, Gillespie C, **Zabar S**. Gaspung for air: measuring patient education and activation skillsets in two clinical assessment contexts. *BMJ Simulation and Technology Enhanced Learning*. 2021;7:428-430.

Carroll E, Nelson A, Kurzweil A, **Zabar S**, Lewis A. Using Objective Structured Clinical Exams (OSCE) to teach neurology residents to disclose prognosis after hypoxic ischemic brain injury. *Journal of Stroke and Cerebrovascular Diseases*. 2021;30(7):105846.

Boardman D, Wilhite JA, Adams J, Sartori D, Greene R, Hanley K, **Zabar S**. Telemedicine Training in the COVID Era: Revamping a Routine OSCE to Prepare Medicine Residents for Virtual Care. *Journal of Medical Education and Curricular Development*. 2021; 8:23821205211024076.

Howell HB, Desai PV, Altshuler L, McGrath M, Ramsey R, Vrablik L, Levy FH, **Zabar S**. Teaching and assessing communication skills in pediatric residents: how do parents think we are doing? *Academic Pediatrics*. 2021: S1876-2859(21)00318-1.

Haber J, Hartnett E, Cipollina J, Allen K, Crowe R, Roitman J, Feldman L, Fletcher J, **Ng G**. Attaining interprofessional competencies by connecting oral health to overall health. *Journal of Dental Education*. 2021;85(4):504-512.

Fisher H, Re C, Wilhite J, Hanley K, Altshuler L, Schmidtburger J, Gagliardi M, **Zabar S**. A novel method of assessing clinical preparedness for COVID-19 and other disasters. *International Journal for Quality in Health Care*. 2021;33(1):mzaa116.

Belovarac BJ, **Zabar SR**, Warfield D, Bannan MA, Rapkiewicz AV. The OSPE Objective Structured Pathology Examination. *American Journal of Clinical Pathology*. 2021;155(3):324-332.

Ng G, Lugassy DM. A pilot study to explore novice debriefers' post-simulation debriefing experiences. *Simulation & Gaming*. 2021;52(4):465-477.

Janjigian M, Dembitzer A, Srisarajivakul-Klein C, Hardower K, Cooke D, **Zabar S**, Sauthoff H. Design and evaluation of the I-SCAN faculty POCUS program. *BMC Medical Education*. 2021;21(1):22.

Errichetti A, **Drda V**. Developing humanistic competence through narrative medicine. January 4, 2021. Accessed November 24, 2021. <https://www.healthysimulation.com/29549/developing-humanistic-competence-narrative-medicine/>

Sartori DJ, Hayes RW, Horlick M, Adams JG, **Zabar SR**. The telehealth OSCE: preparing trainees to use telemedicine as a tool for transitions of care. *Journal of Graduate Medical Education*. 2020;12(6):764-768.

Stainman RS, Lewis A, Nelson A, **Zabar S**, Kurzweil AM. Training in neurology: identifying and addressing struggling colleagues in the era of physician burnout. *Neurology*. 2020;95(17):796-799.

Lawrence K, Hanley K, Adams J, Sartori DJ, Greene R, **Zabar S**. Building telemedicine capacity for trainees during the novel coronavirus outbreak: a case study and lessons learned. *Journal of General Internal Medicine*. 2020;35(9):2675-2679.

ORAL AND WORKSHOP PRESENTATIONS

In Our Community

Ng G. COVID-19 impact on simulation-based education in pre-licensure nursing education: an overview. Oral presentation at: Annual BMCC Nursing Advisory Board Meeting; March, 2021; New York, NY.

Zabar S. The learning must go on: remote simulation. Oral presentation at: NYU Medical Education Day; November, 2020; New York, NY.

Carroll E, Nelson A, Kurzweil A, **Zabar S**, Lewis A. Using Objective Structured Clinical Exams (OSCE) to teach neurology residents to disclose prognosis after hypoxic ischemic brain injury. Oral Presentation at: Fifth Annual Medical Education Innovations and Scholarship Conference, NYU Grossman School of Medicine; Nov 9-10, 2020; New York, NY.

Gillespie C, Wilhite J, Hanley K, Adams J, **Zabar S**. Comprehensive OSCEs as opportunities for faculty to make entrustment judgments: how are standardized patient assessments of performance associated with faculty judgments of “entrustability”? Oral Presentation at: Fifth Annual Medical Education Innovations and Scholarship Conference, NYU Grossman School of Medicine; Nov 9-10, 2020; New York, NY.

Zabar S. Telemedicine education. Oral presentation at: House Staff Patient Safety Council, NYU Langone Health; September, 2020; New York, NY.

State, Regional and National

Stainman R, Han S, **Zabar S**, Busis N, Kurzweil A. Creating and implementing a teleneurology simulation: preparing trainees for the virtual world. Oral presentation at: American Academy of Neurology (AAN) Conference; April, 2021; Virtual.

Carroll E, Nelson A, Kurzweil A, **Zabar S**, Lewis A. Using Objective Structured Clinical Exams (OSCE) to teach neurology residents to disclose prognosis after hypoxic ischemic brain injury. Oral presentation at: American Academy of Neurology (AAN) Conference; April, 2021; Virtual.

Fisher H, Altshuler L, Chodosh J, Langford A, **Zabar S**. What did you say? assessing a virtual GOSCE to train RAs who recruit older adults to clinical trials. Oral presentation at: SGIM Conference; April, 2021; Virtual.

Eliasz K, Ark T, Mulder K, von Stockhausen K, **Zabar S**, Dodson L, Prunuske J, Bublik-Anderson A, Francis M, Green E, Schumann E, Crowe R, Nicholson J, Suelzer E, Kalet A. Learning beyond the simulation center walls: transitioning an in-person simulation for near-graduating medical students to a virtual-only format. Oral presentation at: SGIM Conference; April, 2021; Virtual.

Lebowitz J, Purnahamsi D, McGrath M, Coble-Sadaphal C, Ron-Li L, **Zabar S**, Ramsey R, Howell H. The private Zoom room: a virtual OSCE addressing adolescent mental health. Platform presentation at: APPD National Meeting; March, 2021; Virtual.

Lugassy, D. Branching out in EM sim: expanding your horizons from high fidelity and procedure simulation. Panel presentation at: Society of Academic Emergency Medicine (SAEM) Simulation Academy Virtual Mentoring/Faculty Development Hour; March, 2021; Virtual.

Zabar S. Telehealth education and simulation. Oral presentation at: GNYHA Telehealth Learning Series; February, 2021; Virtual.

Zabar S. *The Artist of Clinical Medicine: A Conversation with Dr. Sondra Zabar.* Hippie Docs 2.0: Re-Humanizing Medicine Podcast. January, 2021. Accessed November 1, 2021. <https://pod.co/hippie-docs-20-re-humanizing-medicine/the-artist-of-clinical-medicine-a-conversation-with-dr-sondra-zabar>

Winkel A, Cocks P, Porter B, **Phillips D, Zabar S**. Unleashing your inner coach. Oral presentation at: AMA Educational Summit; October, 2020; Virtual.

International

Errichetti T, **Drda V**. Narrative medicine for SP Educators: a basic training workshop. Workshop presented at: Association of Standardized Patient Educators (ASPE); June, 2021; Virtual.

Ng G, Lugassy D. Building expertise: exploring novice debriefers' post-simulation debriefing experiences. Oral presentation at: Center for Medical Simulation Weekly Webinars: Connecting and Learning with CMS; March, 2021; Virtual.

Ng, G. Reflection on reflection: improving feedback & debriefing skills. Oral presentation at: Annual International Meeting on Simulation in Healthcare; February, 2021; Virtual.

Ng, G. Speed mentoring: formal training, masters & certificates in simulation. Oral presentation at: Annual International Meeting on Simulation in Healthcare; February, 2021; Virtual.

Kachu E, Altshuler L, **Drda V**, Dong C, Errichetti A. Managing psychological safety in multi-cultural educational settings. Oral presentation at: Annual International Meeting on Simulation in Healthcare; February, 2021; Virtual.

POSTER PRESENTATIONS

Leibowitz J, Desai P, McGrath M, **Zabar S**, Ramsey R, Howell H. The doctor will Zoom you now: an experiential telemedicine curriculum for pediatric residents.

Platform presentation at: Dancis Day, NYU Pediatric Research Day; May, 2021; Virtual.

Platform presentation at: Pediatric Academic Societies; April, 2021; Virtual.

Platform presentation at: Association of Pediatric Program Directors Regional NY/NJ Spring Meeting; March, 2021; Virtual.

Poster presented at: Association of Pediatric Program Directors National Spring Meeting; March, 2021; Virtual.

Ark T, Gillespie C, Hardowar K, Mari A, Wilhite J, Crowe R, Kalet A, Altshuler L, **Zabar S**. Validation of the CCSE measurement model. Poster presented at: SGIM Conference; April, 2021; Virtual.

Eliasz K, McCrickard M, Wallach A, Hochman K, Hardowar K, Goldberg E, Zabar S. Telemedicine on-boarding in the era of COVID-19: an experiential virtual orientation for newly-hired providers. Poster presented at: SGIM Conference; April, 2021; Virtual.

Eliasz K, **Manko J, Lugassy D**, Fagan I, **Olsen E, Mills E, Choi J, Riles T, Phillips D, Zabar S**. Establishing a shared understanding during COVID-19: incoming interns find an experiential patient safety orientation effective preparation for day 1. Poster presented at: SGIM Conference; April, 2021; Virtual.

Gillespie C, Ark T, Crowe R, Altshuler L, Wilhite J, Hardowar K, Tewksbury L, Hanley K, **Zabar S**, Kalet A. Communication skills over time for eight medical school cohorts: exploration of selection, curriculum, and measurement effects. Poster presented at: SGIM Conference; April, 2021; Virtual.

Boardman D, Wilhite J, Adams J, Sartori D, Greene R, Hanley K, **Zabar S**. Telemedicine training in the COVID era: adapting a routine OSCE and identifying new core skills for training. Poster presented at: SGIM Conference; April, 2021; Virtual.

Zabar S, Winkel A, Cocks P, Tewksbury L, Buckvar-Keltz L, Greene R, **Phillips D**, Gillespie C. Changing hats: lessons learned integrating coaching into UME and GME. Poster presented at: SGIM Conference; April, 2021; Virtual.

Lebowitz J, Desai P, Coble-Sadaphal C, McGrath M, **Zabar S**, Ramsey R, Howell H. The private Zoom room: A virtual OSCE addressing adolescent mental health.

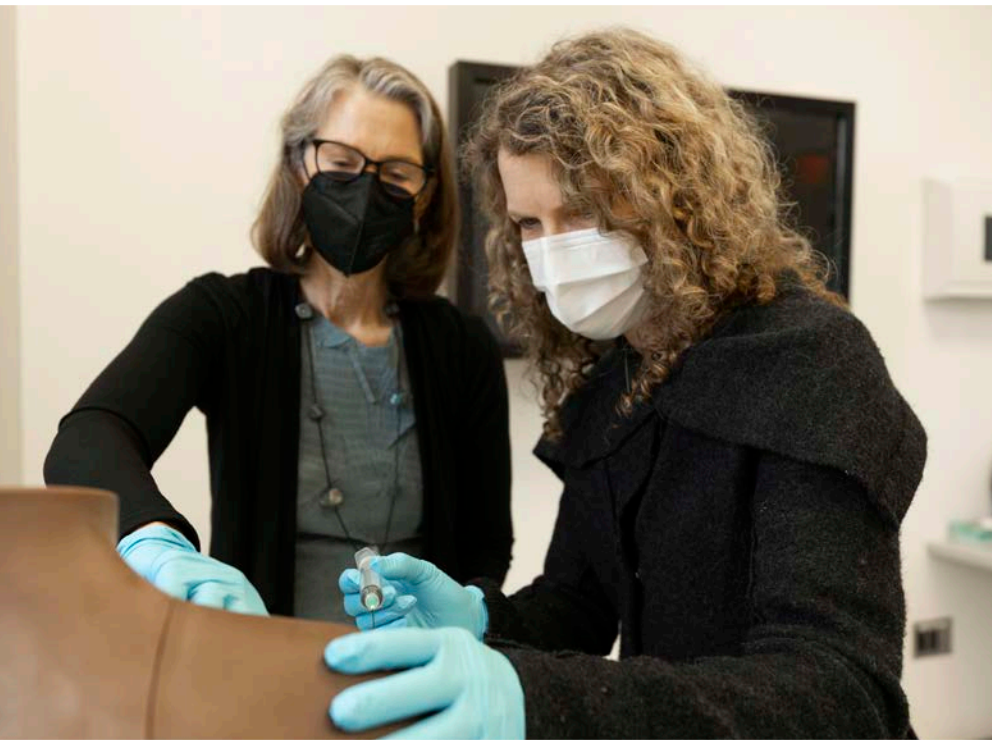
Poster (award-winning) presented at: Pediatric Academic Societies; April, 2021; Virtual.

Platform presentation at: Association of Pediatric Program Directors National Spring; March, 2021; Virtual.

Desai P, Lebowitz J, McGrath M, **Zabar S**, Ramsey R, Howell H. Zoom OSCEs: virtually the same as the real thing?

Poster presented at: Pediatric Academic Societies; April, 2021; Virtual.

Poster presented at: Association of Pediatric Program Directors National Spring Meeting; March, 2021; Virtual.



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