# **SAFAR SYMPOSIUM**

Innua

Acute Brain Care: Bringing the Future to the Bedside

Thursday May 26, 2022 | 8 am to 5:30 pm | University Club Friday May 27, 2022 | 9 am to 12:30 pm | WISER

**41st Peter and Eva Safar Lecture for the Sciences and Humanities Geoffrey Ling, MD, PhD** CEO, On Demand Pharmaceuticals

Say Yes to a Different Attitude to Help Advance Patient Care



# 19<sup>th</sup> Annual Safar Symposium May 26, 2022

### University Club, Ballroom B – 123 University Place

- 7:30 Registration and Continental Breakfast
- 8:00 8:10 **Opening Comments Patrick M. Kochanek, MD, MCCM** Distinguished Professor and Vice Chair, Critical Care Medicine Director, Safar Center for Resuscitation Research University of Pittsburgh School of Medicine, Pittsburgh, PA

# 8:10 – 11:45 ACUTE BRAIN CARE: BRINGING THE FUTURE TO THE BEDSIDE

#### Moderators: Robert S.B. Clark, MD

Professor, Critical Care Medicine and Pediatrics Vice Chair, Department of Critical Care Medicine UPMC Children's Hospital of Pittsburgh, Pittsburgh, PA

#### Yan Xu, PhD

Peter Winter Professor of Anesthesiology Professor of Pharmacology & Chemical Biology, Physics & Astronomy, and Structural Biology Vice Chair for Basic Sciences, Department of Anesthesiology and Perioperative Medicine University of Pittsburgh School of Medicine, Pittsburgh, PA

#### 8:10 – 8:15 Introduction of the Children's Neuroscience Institute Lecture

#### Hülya Bayır, MD

Professor of Critical Care Medicine, Environmental and Occupational Health, and Pediatrics Director, Children's Neuroscience Institute, UPMC Children's Hospital of Pittsburgh, Pittsburgh, PA

| 8:15 – 8:40   | Inaugural Children's Neuroscience Institute Lecture<br>Alexis Topjian, MD, MSCE<br>Director of Pediatric Neurocritical Care<br>Departments of Anesthesia and Critical Care, and Pediatrics<br>University of Pennsylvania Perelman School of Medicine<br>The Children's Hospital of Philadelphia, Philadelphia, PA<br>Multi-Modal Monitoring to Guide Care after<br>Pediatric Cardiac Arrest |
|---------------|---|
| 8:40 - 8:45   | Discussion  |
| 8:45 – 9:10   | Max B. Kelz, MD, PhD<br>Distinguished Professor and Vice Chair for Research<br>Department of Anesthesiology and Critical Care Medicine<br>University of Pennsylvania, Philadelphia, PA<br>To Oblivion and Back: Surprising Insights about Deep<br>Anesthetic States and the Human Brain   |
| 9:10 – 9:15   | Discussion  |
| 9:15 – 9:40   | Frederick Korley, MD, PhD<br>Associate Professor of Emergency Medicine<br>University of Michigan, Ann Arbor, MI<br>Biomarker-Guided Evaluation and Management of<br>Acute Traumatic Brain Injury  |
| 9:40 – 9:45   | Discussion  |
| 9:45 – 10:00  | BREAK   |
| 10:00 – 10:25 | <b>Cesar V. Borlongan, PhD</b><br>Distinguished Professor, Director and Vice Chairman<br>Department of Neurosurgery and Brain Repair<br>University of South Florida Morsani College of Medicine<br>Tampa, FL<br><b>Probing the Peripheral Inflammation in Traumatic</b><br><b>Brain Injury</b>  |
| 10:25 – 10:30 | Discussion  |

10:30 - 10:55 Jennifer L. Collinger, PhD Associate Professor Department of Physical Medicine and Rehabilitation Rehab Neural Engineering Labs University of Pittsburgh School of Medicine, Pittsburgh, PA Intracortical Brain-Computer Interfaces to Restore Arm and Hand Function 10:55 - 11:00Discussion 11:00 - 11:25Jay Rakkar, MD Clinical Instructor, Division of Pediatric Critical Care Medicine UPMC Children's Hospital of Pittsburgh NIH T-32 Post-Doctoral Scholar Safar Center for Resuscitation Research, Pittsburgh, PA Non-Invasive Assessment of Intracranial Pressure and Brain Compliance 11:25 - 11:30Discussion 11:30 - 11:45Nancy Caroline Fellow Award and the S. William Stezoski **Technician Award presentations and** Morning Session Closing Remarks Patrick M. Kochanek, MD, MCCM 11:45 - 12:00BRFAK 12:00 - 1:0041<sup>st</sup> Peter & Eva Safar Annual Lectureship in Medical Sciences and Humanities Geoffrey Ling, MD, PhD CEO, On Demand Pharmaceuticals Say Yes to a Different Attitude to Help Advance Patient Care 1:00 - 1:45Reception Ballroom B, University Club

# The 41<sup>st</sup> Peter and Eva Safar Annual Lectureship in Medical Sciences and Humanities

#### Guest Speaker:

#### Geoffrey Ling, MD, PhD

CEO, On Demand Pharmaceuticals Rockville, MD Say Yes to a Different Attitude to Help Advance Patient Care



**Dr. Geoffrey Ling** is a pharmacologist and physician, and co-founder and CEO of On Demand Pharmaceuticals. He is a professor of neurology, neurosurgery and anesthesiology and critical care medicine at Johns Hopkins University and the Uniformed Services University of the Health Sciences, and an attending neurocritical care physician at Johns

Hopkins Hospital. He serves as the Chair of the Veterans Administration's National Research Advisory Council.

Dr. Ling is a retired U.S. Army colonel after 21 years on active duty. He served as an intensive care physician with the 452<sup>nd</sup> CSH (combat support hospital) in OEF-Afghanistan (2003) and 86<sup>th</sup> CSH and 10<sup>th</sup> CSH in OIF-Iraq (2005). COL Ling has had four in-theater missions as a member of the Joint Chiefs of Staff "Gray Team" to assess traumatic brain injury care in both combat theaters (2009, 2011). The 10th CSH named him their first "Physician of the Month." He was a "requested by name" consultant to Congresswoman Gabby Gifford's trauma team after her tragic attack.

Dr. Ling was the Founding Director of the Biological Technologies Office at the Defense Advanced Research Projects Agency (DARPA), where he was previously a program manager and Deputy Director of the Defense Sciences Office. He served as an Assistant Director in the Science Division of President Obama's White House Office of Science, Technology and Policy. His BA with honors is from Washington University in St. Louis, MD from Georgetown University (elected to AOA) and his PhD in neuropharmacology is from Cornell University. He completed his neurology residency at Walter Reed Army Medical Center, neurocritical care fellowship at Johns Hopkins, and research fellowship in neuropharmacology at the Memorial Sloan Kettering Cancer Center. He is board certified in both neurology and neurocritical care. He has published more than 200 peer-reviewed articles and book chapters.

# Multi-Departmental Trainees' Research Day Ballroom A

| 1:00 – 1:45                | Registration and Poster Setup  |
|----------------------------|--|
| 2:00 – 2:05                | Opening Comments<br>Patrick M. Kochanek, MD, MCCM  |
| 2:05 – 3:50                | Poster Session   |
|                            | Freedom House 2.0 Ballroom B   |
| Moderator:                 | <b>Clifton Callaway, MD, PhD</b><br>Professor & Executive Vice Chair, Emergency Medicine<br>University of Pittsburgh Medical Center, Pittsburgh, PA  |
| 4:00 – 4:10                | Dan Swayze, DrPH, MBA, MEMS<br>Vice President, Community Services<br>UPMC Health Plan, Pittsburgh, PA<br><i>History of Freedom House</i>   |
| 4:10 – 4:30                | <ul> <li>Mr. Mitchell J. Brown</li> <li>Former Freedom House Paramedic, Pittsburgh, PA</li> <li>Former Columbus City Councilmember, Columbus, OH</li> <li>Mr. Phil Hallen</li> <li>President Emeritus, Falk Foundation, Pittsburgh, PA</li> <li>Mr. John Moon</li> <li>Retired Assistant Chief, City of Pittsburgh EMS</li> <li>Former Freedom House Paramedic, Pittsburgh, PA</li> <li>Freedom House Ambulance: Three Personal Views</li> <li>from the Beginning</li> </ul> |
| 4:30 – 4:50<br>4:50 – 5:00 | Emily Lovallo, MD<br>Assistant Professor of Emergency Medicine<br>Medical Director, Freedom House 2.0, Pittsburgh, PA<br>Mr. Kenneth Hickey<br>Program Manager, UPMC Health Plan, Pittsburgh, PA<br>Lessons Learned from Freedom House 2.0's<br>First Year and a Look to the Future<br>Discussion  |
| 5:00 – 5:15                | Judges Meeting Ivy Room  |
| 5:15 – 5:30                | Trainee Awards Presentation Ballroom B   |

# 19<sup>th</sup> Annual Safar Symposium May 27, 2022 WISER, 230 McKee Place, Suite 300

- 8:30 9:00 Registration and Continental Breakfast
- 9:00 9:15 **Opening Comments Patrick M. Kochanek, MD, MCCM** Distinguished Professor and Vice Chair, Critical Care Medicine Director, Safar Center for Resuscitation Research University of Pittsburgh School of Medicine, Pittsburgh, PA

#### Paul E. Phrampus, MD, CPE

Medical Director, Wolff Center at UPMC Medical Director, Patient Safety, UPMC Health System Director, Winter Institute for Simulation, Education and Research (WISER) Professor, Departments of Emergency Medicine and Anesthesiology University of Pittsburgh and UPMC, Pittsburgh, PA

# 9:00 – 12:30 COMPETENCY-BASED EDUCATION, ASSESSMENTS, AND SIMULATION

#### Moderator: John M. O'Donnell, DrPh, CRNA Professor and Chair, Department of Nurse Anesthesia Director, Nurse Anesthesia Program, University of Pittsburgh School of Nursing, Associate Director, WISER, Pittsburgh, PA

#### 9:15 – 9:45 John M. O'Donnell, DrPh, CRNA Professor and Chair, Department of Nurse Anesthesia Director, Nurse Anesthesia Program, University of Pittsburgh School of Nursing, Associate Director, WISER, Pittsburgh, PA Enhancing Efficiency While Maintaining Effectiveness in Simulation

9:45 – 10:15 **KT Waxman, DNP, MBA, RN, CNL, CENP, CHSE, FSSH, FAONL, FAAN** Professor and Director, DNP Program Director, California Simulation Alliance University of San Francisco, San Francisco, CA *Using Simulation to Ensure Competency: Do We Have the Evidence?* 

 10:15 – 10:45 Kristen Brown, DNP, CRNP, CPNP-AC, CHSE-A, FAAN Assistant Professor Director of Immersive Learning & Digital Innovation Practice Johns Hopkins School of Nursing Simulation Strategic Projects Lead, Johns Hopkins Medicine Simulation Center, Baltimore, MD Leveraging Technology to Advance Healthcare Simulation Education

- 10:45 11:00 BREAK
- 11:00 11:30 **Joseph Lopreiato, MD, MPH, CHSE-A, FSSH** Professor of Pediatrics, Medicine, and Nursing Associate Dean for Simulation Education Uniformed Services University of the Health Sciences Bethesda, MD Using Simulation and Deliberate Practice to Improve Patient Handovers in a Military Population
- 11:30 12:00 Valerie L. Fulmer, BA Director, Standardized Patient Program University of Pittsburgh School of Medicine Past President, Association of SP Educators, Pittsburgh, PA SP Assessments: Building Quality Events through Design and Training
- 12:00 12:30 Morning Wrap Up/Highlights Paul E. Phrampus, MD, CPE

Closing Comments Patrick M. Kochanek, MD, MCCM

# 19<sup>th</sup> Annual Safar Symposium May 26, 2022

# SPEAKER PROFILES

#### Inaugural Children's Neuroscience Institute Lecturer



**Dr. Alexis Topjian** is Associate Professor of Anesthesia, Critical Care, and Pediatrics at the University of Pennsylvania Perelman School of Medicine and an attending physician at the Children's Hospital of Philadelphia Pediatric Intensive Care Unit. She is the Director of Neurocritical Care for the Department of Anesthesia and Critical Care Medicine. Her clinical and research focuses are on pediatric

resuscitation science, specifically post cardiac arrest care. She is co-PI for the NIH-funded Pediatric Influence of Cooling duration on Efficacy in Cardiac Arrest. She has published more than 140 peer reviewed publications with a focus on pediatric post cardiac arrest care, status epilepticus, and pediatric neurocritical care. She is the 2020 and 2025 Chair of the American Heart Association Emergency Cardiovascular Care Pediatric Guidelines Writing Group. She is committed to improving the care of critical neurologic injury in children with the goal of improving survival, neurologic and quality of life outcomes.



**Dr. Max B. Kelz** Inspired by a case of delayed emergence, in which a narcoleptic patient took more than six hours to regain consciousness after an anesthetic whose known actions dissipated in minutes, Dr. Kelz began to question where and how general anesthetics exert their hypnotic effects. In the process, Dr. Kelz became one of the first to question the notion that exit from the anesthetic state is a

passive, mechanistic mirror image of anesthetic induction. Rather his studies in mice genetically engineered to develop postnatal narcolepsy demonstrated that neuronal events permitting recovery of consciousness could be distinct from those enabling entry into the anesthetic state. The Kelz lab also discovered that the brain harbors intrinsic mechanisms to track whether it is awake or unconscious and attempts to resist changes in its arousal state—a process termed neural inertia. As a practicing clinical anesthesiologist and basic scientist, Dr. Kelz has conducted experiments in fruit flies, zebrafish, mice, and humans, gaining mechanistic insights across the phylogenetic tree. He has demonstrated

that such basic mechanisms leading to hysteresis are highly conserved across invertebrates and mammals and have implications for return of cognition in humans exiting states of general anesthesia.



**Dr. Frederick Korley** is an Associate Professor of Emergency Medicine at the University of Michigan. He completed his medical degree and residency training in emergency medicine at the Northwestern University where he served as chief resident. He subsequently completed a doctoral degree in clinical investigation at the Johns Hopkins University Bloomberg School of Public Health and was elected to Phi Beta Kappa. He

was formerly on faculty at Johns Hopkins University as the inaugural recipient of Robert E. Meyerhoff Endowed Professorship.

His research work is focused on the development of novel diagnostics and therapeutics for traumatic brain injury (TBI). With regards to the development of novel diagnostics, Dr. Korley has two patents for biofluid-based biomarkers for brain injury detection and outcome prognostication. He is also a national principal investigator of two federally funded multi-center research studies that are investigating the use of biofluid-based biomarkers for 1) subject selection in clinical trials; 2) monitoring individual patient response to promising neuroprotective agents. With regards to the development of therapeutics for TBI, Dr. Korley is a principal investigator of an NINDS funded phase II adaptive design clinical trial that is investigating the optimal treatment parameters of hyperbaric oxygen that is most likely to demonstrate improvement in the rate of good neurological outcome versus control in a subsequent confirmatory trial. During the ongoing COVID-19 pandemic, Dr. Korley leveraged his expertise in the testing of novel therapeutics to co-lead an NHLBI-funded multi-center clinical trial of COVID-19 convalescent plasma in outpatients (C3PO) as one of the national co-PIs. He serves on the NINDS Neurological Sciences and Disorders A (NSD-A) study section and the National Academies of Sciences, Engineering and Medicine's Committee on Accelerating Progress in Traumatic Brain Injury Research and Care. Dr. Korley is the recipient of the 2021 Society of Academic Emergency Medicine (SAEM) Mid-Career Investigator Award.



**Dr. Cesar V. Borlongan** is a Distinguished Professor and Vice-Chairman for Research at USF Morsani College of Medicine's Department of Neurosurgery and Brain Repair, and Director of the USF Center of Excellence for Aging and Brain Repair. His highly innovative translational "bench to clinic" research has led to 5 FDA-approved clinical trials of cell transplantation in stroke, traumatic brain injury, and

cerebral palsy. He is an author of more than 430 peer-reviewed publications, lead editor of 2 books, and editor and editorial board member of many scientific journals, including Stem Cells, Stroke, Journal of Cerebral Blood Flow and Metabolism, PLoS One, and Brain Research. He is funded by NIH, DOD, VA, and several stem cell-based biotech companies. He has been a regular study section reviewer for NIH, DOD and VA, and has served over the last decade as the Scientific Chair of Maryland Stem Cell Research Foundation. He was the 2015 President-Elect of American Society for Neural Therapy and Repair, and currently the President of Italy-based International Placenta Stem Cell Society. He was featured in The Lancet for Lifeline Perspectives in 2008. His research interests include pathological examination of the role of impaired mitochondria, splenic response, and gut dysbiosis in the inflammation-plagued secondary cell death that accompanies stroke and traumatic brain injury. In addition, he probes the potential of stem cells in rescuing the mitochondria, silencing the splenic reaction, and normalizing the gut microbiome towards seguestration of both central and peripheral inflammation. Altogether, his strategy is to understand the pathological condition of CNS disorders with a focus on inflammation and its treatment with stem cell-based regenerative medicine.



**Dr. Jennifer Collinger** is an Associate Professor in the Department of Physical Medicine and Rehabilitation at the University of Pittsburgh. Dr. Collinger's research interests are related to the use of neuroprosthetics to restore function for individuals with upper limb paralysis or loss. She is developing intracortical brain-computer interface technology for individuals with tetraplegia. Her work also includes

non-invasive imaging for measuring neuroplasticity after spinal cord injury or amputation. She is currently the President of the International Brain-Computer Interface Society.



**Dr. Jay Rakkar** is a Clinical Instructor at UPMC Children's Hospital of Pittsburgh and an NIH T32 Postdoctoral Scholar at the Safar Center for Resuscitation Research at the University of Pittsburgh. Dr. Rakkar's research focuses on pediatric traumatic brain injury (TBI). He has helped characterize pediatric-specific ICP, CPP and PbtO<sub>2</sub> temporal profiles and respective thresholds that optimally

dichotomize outcomes in children with severe TBI. Using highly granular data, he has also helped develop a new physiologic index representing intracranial compliance as well as clinical models for measuring the intensity of medical therapies utilized in TBI management. Additionally, he continues to collaborate with experts in Biophotonics from Carnegie Mellon University to validate novel methods of non-invasive ICP monitoring in children.



**Dr. Dan Swayze** is the Vice President of Community Services for the UPMC Health Plan and has 30 years of healthcare experience, including 24 years at UPMC. During his tenure he served for more than a decade as the Vice President and Chief Operating Officer of the Center for Emergency Medicine, where he received several regional, state, and national awards for his role as a pioneer in the emerging field of community paramedicine.



*Mr. Mitchell J. Brown* has dedicated his career to promoting safe and healthy communities. He has left an indelible impact on public safety organizations across Ohio and the United States.

Brown began his career as a paramedic. In the late 1960's, he championed a radical emergency medical response protocol designed to provide pre-hospital

emergency care to residents in Pittsburgh, PA. This effort sparked a medical revolution. The experiment known as "Freedom House", was the beginning of today's modern paramedic and ambulance response system.

A decade later, he took that same passion and commitment to excellence to Cleveland, Ohio, where he served as the Commissioner for Emergency Medical Services in the Department of Public Safety. There, Brown developed and implemented the Paramedic Training Institute and created the Advanced Life Support Program. Brown became the City of Cleveland's Director of the Department of Public Safety in 1986 and instituted a plethora of initiatives that enhanced the quality of life for residents.

Public service is ingrained in Brown, from leading St. Vincent Charity Hospital Health Center department of Surgery Division of Trauma as the Administrative Director to becoming the Registrar for the Ohio Bureau of Motor Vehicles, the Director of the Ohio Department of Public Safety, and then the Director of the Ohio Lottery, the former United States Air Force serviceman has diligently and passionately protected and served citizens throughout the nation for more than 40 years.

Brown was appointed Director of the City of Columbus Department of Public Safety in April 2000 where he oversaw the operation of the Division of Police, Division of Fire, and Division of Support Services. Under his direction, public safety thrived. Both the Division of Fire and the Division of Police obtained national accreditation status, training academies for both divisions were built, seven fire stations were constructed and emergency medical delivery to residents was designed. This effort placed a medic at each of the 34 fire stations. He oversaw the purchase of 201 fire apparatus, obtained \$34 million in homeland security grants, implemented an emergency medical billing structure that generated over \$100 million in revenue for the city that continues today, and appointed the city's first African-American Fire Chief.

As a member of Columbus City Council, he continued to champion efforts to improve public safety and accountability for members of the Division of Fire and Police. He also initiated the distribution of Narcan to Columbus Police officers for use in patrol. Serving as the chairman of the Veterans and Senior Services committee, he bolstered efforts to support these often, underserved groups.



*Mr. Philip Hallen* was President of the Falk Foundation from 1963 to 2001. The foundation terminated its charter in 2015 after decades of human rights grant making in Pittsburgh, nationally and internationally. He led the foundation through the historic years of the civil rights movement and the ongoing struggle for racial and gender justice. It

became one of the only foundations to focus its grant making on the intersection of health policy, civil rights, and social justice.

Upon his retirement in 2001, he was named President Emeritus of the foundation and an endowed professorship, the Philip Hallen Chair in Community Health and Social Justice was established at the University of Pittsburgh. He currently serves on several national non-profit boards and consults with several national foundations. Freedom House Ambulance was one of the most impactful and milestone grants made by the foundation, marking the Hill District-based program as a blueprint for almost all of today's modern EMS services.



*Mr. John Moon* retired after 34 years as the Assistant Chief of Pittsburgh Emergency Medical Services. He is also a former Freedom House paramedic.



**Dr. Emily Lovallo** is an Emergency Physician practicing at UPMC Mercy and Magee hospitals since 2015. She completed her residency and emergency ultrasound fellowship at Highland Hospital in Oakland, CA where she was inspired by numerous Social Emergency Medicine initiatives with positive local impact that she hopes to translate to the Pittsburgh community.



*Mr. Kenneth Hickey* is the Program Manager of Community Services at UPMC Health Plan and has 10+ years in healthcare/EMS. Most recently, he codeveloped the Freedom House 2.0 initiative, which serves as a career pathway for marginalized communities to enter the healthcare and EMS workforce.

# 19<sup>th</sup> Annual Safar Symposium May 27, 2022

### SIMULATION SPEAKER PROFILES



**Dr. John O'Donnell** is Professor and Chair of the Department of Nurse Anesthesia and Director of the Nurse Anesthesia Program at the University of Pittsburgh. His other role at the University of Pittsburgh is as the Senior Associate Director at WISER, the Winter Institute for Simulation Education and Research which is a fully accredited, internationally renowned simulation center.

O'Donnell is one of only two U.S. CRNAs honored as a Fellow of the Society for Simulation in Healthcare where he currently serves as a member of the Executive Board and the current Treasurer. John has published numerous articles and book chapters and serves as the Chair of the WISER Research Committee. He consults nationally and internationally in Simulation Faculty Development and has collaborated in simulation publication with scholars in Beijing, Taipei, Hong Kong, Seoul, Bangkok and Tokyo. He has been PI of multiple US educational and research grants having received more than 3.5 million dollars in funding during his career. In 2017 with support from the University of Pittsburgh, he co-founded Lumis Corp. an augmented reality simulation education and technology company and serves as Director of Curriculum Development and Customer Engagement.



**Dr. K.T. Waxman** is a national nurse leader and executive with extensive experience in healthcare and corporate settings. She is a Professor at the University of California, San Francisco and is the Director of the Doctor of Nursing Practice (DNP) program. She is also the Director of the California Simulation Alliance (CSA). In addition to her work at UCSF and the CSA, she is the Editor-in Chief for Nursing Administration

Quarterly (NAQ). An internationally known speaker and author, Waxman is also a past president of the Association of California Nurse Leaders (ACNL) and past board member, serving as Treasurer, for the American Organization for Nursing Leadership (AONL). She is a Past President of the Society for Simulation in Healthcare (SSH), a 5,000+ member international, inter-professional organization.

Dr. Waxman's work has been published extensively and can be found in journals such as the Journal for Simulation in Healthcare, Clinical Simulation for Nursing, JONA, Journal of Nursing Education, NAQ, Nurse Leader and Creative Nursing journals. She has authored 3 books on Finance and Budgeting and the 3rd edition of "Financial and Business Management for the DNP", published by Springer will be out this Spring. She co-authored "Healthcare Simulation Program Builder", is co-editor of "Comprehensive Healthcare Simulation: Nursing" to be published in 2022 and has authored several chapters in simulation and leadership textbooks.

Dr. Waxman received her DNP from the University of San Francisco, with an emphasis on health systems leadership and a concentration in clinical simulation. She holds certifications as Clinical Nurse Leader), Certification in Executive Nursing Practice, Certification as a Simulation Healthcare Educator, and is a Fellow in the American Academy of Nursing, the American Organization for Nursing Leadership, and the Society for Simulation in Healthcare.



**Dr. Kristen M. Brown** is an assistant professor and the Director of Immersive Learning & Digital Innovation Practice at the Johns Hopkins University School of Nursing and the Simulation Strategic Projects Lead for the Johns Hopkins Medicine Simulation Center. Dr. Brown develops simulation curriculum, plans innovative, immersive training events, and studies the use of simulation as a teaching method.

Her passion for simulation education stems from her years in clinical practice as a pediatric critical care nurse practitioner. She has had a 20-year nursing career devoted to the care of critically ill children, and she has worked in the Pediatric Intensive Care Unit at the Johns Hopkins Hospital as a nurse practitioner for the past 14 years. She designed, implemented, and studied a multi-institutional, high-fidelity simulation boot camp training event for advanced practice nurses for her doctoral work. This innovative training has sparked an annual training event. She was selected into the National League for Nursing Simulation Leadership Program for Simulation Educators and is a Certified Healthcare Simulation Educator-Advanced® by the Society for Simulation in Healthcare. This certification distinguishes those who have proven themselves to be advanced educators and leaders in their healthcare simulation practice.

In her faculty role, she is currently incorporating simulation into advanced practice nursing programs, and she has also led the efforts to implement and study new technology to provide innovative solutions for distance learning, including telepresence robots and virtual simulation, including screen-based and virtual reality platforms (VR) across all programs at the JHSON. Dr. Brown earned her BSN from the University of Pittsburgh School of Nursing, her MS with an Acute Care Pediatric Nurse Practitioner focus from the University of Maryland School of Nursing, and her DNP from the Johns Hopkins University School of Nursing.



**Dr. Joseph Lopreiato** received his Doctor of Medicine degree from Georgetown University in Washington, DC and his Master of Public Health degree from the University of Texas. He also completed work in faculty development and teaching at Michigan State University. He is currently the Associate Dean for Simulation Education and Professor of Pediatrics, Medicine and Nursing at the Uniformed Services

University of the Health Sciences in Bethesda, MD. He is the medical director of the Val G. Hemming Simulation Center, a 30,000 square foot (10, 000 square meters) multidisciplinary learning laboratory serving learners across the continuum of medicine and nursing. He is a fellow of the American Academy of Pediatrics and the Society for Simulation in Healthcare, a member of the American Pediatric Society and the Association of Standardized Patient Educators. He is the past president of the Society for Simulation in Healthcare simulation in Healthcare and is certified by the Society as an advanced healthcare simulation educator.



*Ms. Valerie L. Fulmer* is Operations Director for the University of Pittsburgh School of Medicine Standardized Patient Program. She oversees all programmatic operations, SP session design, material development and hiring /training of SPs for the everburgeoning SP Program. In addition to the medical school curricula, she assists regional health sciences

and other professionals to design objective driven SP curricular events.

In August of 2021 she received the international Association of SP Educators Outstanding Educator of the Year Award, which recognizes long standing service to the community and remarkable talent within the membership of the Association of Standardized Patient Educators. From 2016-2020 she served as the president of the Association of Standardized Patient Educators, the premier international association dedicated to best practice in SP Methodology. During her tenure at ASPE, she assisted in the growth of several SP programs across the eastern and southern regions of China leveraging the ASPE Standards of Best Practice.

Valerie has presented dozens of workshops on behalf of the school of medicine at simulation and educational conferences around the world, winning awards for outstanding educational innovation. Her work is published on Med Ed Portal, the medical education materials site for the Association of American Medical Colleges (AAMC), and in the European Journal for Person Centered Health Care.

In 2015, she helped to lead the charge in the opening of a Standardized Patient Program for the U of Pittsburgh partner school, Nazarbayev University School of Medicine in Kazakhstan, which inspired her passion for speaking about SP Methodology at home and internationally.

She is also a member of the Society for Simulation in Healthcare (SSIH), the International Nursing Association for Clinical Simulation & Learning (INACSL), and the Society in Europe for Simulation applied to Medicine (SESAM).

# The Safar Center for Resuscitation Research gratefully acknowledges the support of our sponsors:

Dr. Ake N. Grenvik Endowed Chair in Critical Care Medicine **Department of Anesthesiology & Perioperative Medicine Department of Critical Care Medicine Department of Emergency Medicine Department of Neurological Surgery Department of Physical Medicine & Rehabilitation University of Pittsburgh School of Medicine** UPMC Peter M. Winter Institute for Simulation, Education and Research S. William Stezoski Family Allan Braslow and Virginia Klunder

Children's Neuroscience Institute | UPMC Children's Hospital of Pittsburgh

# Safar Symposium Planning Committee

The 19th Annual Safar Symposium is hosted by Patrick M. Kochanek, MD, MCCM, director of the Safar Center for Resuscitation Research, and Aman Mahajan, MD, PhD, MBA, chair of the Department of Anesthesiology and Perioperative Medicine. **Committee members are:** Christa Brown, MA John O'Donnell, DrPH, CRNA Clifton W. Callaway, MD, PhD Paul E. Phrampus, MD, CPE Robert S.B. Clark, MD

> C. Edward Dixon, PhD Anthony E. Kline, PhD

Amy K. Wagner, MD Yan Xu. PhD

University of Pittsburgh

> SAFAR CENTER FOR RESUSCITATION RESEARCH UNIVERSITY OF PITTSBURGH



UPMC CHILDREN'S HOSPITAL OF PITTSBURGH

www.Safar.Pitt.edu