

Forum Workshop

Artificial Intelligence in Health Professions Education

Required Reading: [Artificial Intelligence for Health Professions Educators](#)

Overall Workshop Objective: To explore training and education in AI that has relevance and importance for all the health professions while also recognizing the use of AI in education and training within and across health professions.

March 3: Pre-workshop Virtual Session

[The Why]

Critical Importance & Relevance of AI in HPE

Session Objective: To move toward a shared understanding of AI by exploring the current state in practice across disciplines, which drives the need for training

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| 10:30amET | <p>Welcome from Workshop Chair</p> <p style="text-align: center;">The Role of AI Across Health Professions</p> <p>Moderator – Carole Tucker, Workshop Chair & Associate Dean of Research, School of Health Professions, University of Texas Medical Branch, Galveston</p> <ul style="list-style-type: none"> Cornelius A. James, Clinical Assistant Professor, Departments of Internal Medicine, Pediatrics and Learning Health Sciences, University of Michigan Medical School <p>Q&A</p> <ul style="list-style-type: none"> Health Professional Panelists: <ul style="list-style-type: none"> <u>Using AI to make sense of complex data sets</u> – Moderator’s remarks <u>Interoperability for Effective AI</u> – Kelly Aldrich, Informatics Nurse Specialist, Vanderbilt University <u>AI Conversational Agents for Mental Health</u> – Eduardo Bunge, Associate Chair Psychology Department Palo Alto University <p>Student Response Panel:</p> <ul style="list-style-type: none"> Mollie Hobensack, BSN, RN, PhD Candidate, Columbia University School of Nursing Areeba Abid, MD/PhD Candidate, Emory University School of Medicine <p>Planning committee* asks questions to the panelists & responders</p> <p>Audience is encouraged to ask questions/make comments using the chat function</p> |
| 12noon | Adjourn |

Planning Committee

Carole Tucker, PhD, PT (Chair)

ACAPT Forum Representative

Associate Dean of Research

University of Texas Medical Branch

Judy Gichoya, MD, MS

Assistant Professor, Department of

Radiology

Emory University School of Medicine

Mollie Hobensack, MPhil, BSN, RN

PhD Candidate, Nursing Informatics,

Columbia University

Lisa Howley, PhD, MEd

Senior Director to Transform Medical
Education

Associate Professor of Medical Education

Association of American Medical Colleges

Cornelius A. James, MD

Clinical Assistant Professor

Departments of Internal Medicine,

Pediatrics and Learning Health Sciences

University of Michigan Medical School

Pamela Jeffries, RN

Dean

Vanderbilt University School of Nursing

Kimberly Lomis, MD

Vice President, Undergraduate Medical

Education Innovations

American Medical Association

Dallas Peoples, MS

Program Specialist

Transforming Medical Education

Association of American Medical Colleges

Javaid Sheikh, MD

Dean

Weill Cornell Medicine – Qatar

Carl Sheperis, PhD

Dean

Texas A&M University

College of Education and Human

Development

Planning Committee Member Bios

Carole Tucker, PhD, PT (Chair), is the Associate Dean of Research, Adoue Distinguished Professor in Cognitive Neuroscience, Director of the Center for Recovery, Physical Activity, and Nutrition, and Chair and Professor of the Physical Therapy department at the University of Texas Medical Branch, Galveston. Previously, she was an Associate Professor in the College of Public Health and the College of Engineering at Temple University. Her education and training as both a physical therapist and an electrical engineer provide extensive skills to contribute to research and innovation for individuals with movement impairments. Dr. Tucker has an extensive background in physical therapy clinical practice in pediatrics. Her current research focuses on the development of patient-centered measures including patient-report outcome measures of health status in pediatric populations using modern measurement approaches, bioinformatics application in learning health systems, application of pattern recognition and advanced statistical analytical approaches to large data sets, and development and application of biosensors & related technology to improve function and mobility in individuals with disabilities. She is also involved in interprofessional practice opportunities for students both abroad and locally in the Philadelphia metropolitan region serving immigrant communities with have limited access to health care. She currently serves on the WHO ICF Functioning and Disability Reference Group (FDRG) which is the working group for the International Classification of Functioning, Health & Disability and serves as the ACAPT alternate for the Global Forum on Innovation in Health Professional Education. She has received funding for her research from the NIH, NSF, DoD and Shriners Hospitals for Children. Dr. Tucker is on the editorial boards of Pediatric Physical Therapy, Journal of Neuroengineering and Rehabilitation, and Physical and Occupational Therapy in Pediatrics.

Judy Gichoya, MD, MS, is Assistant Professor in the Department of Radiology and Imaging Sciences at Emory University School of Medicine. Dr. Gichoya is a multidisciplinary researcher, trained as both an informatician and an Interventional radiologist. Dr. Gichoya is a member of the Cancer Prevention and Control Research Program at Winship Cancer Institute. She holds professional memberships with Radiological Society of North America, American College of Radiology, Society of Interventional Radiology, Society of Imaging Informatics in Medicine and American Medical Informatics Association. Dr. Gichoya earned her Medical Degree from Moi University in Kenya. She completed her medical internship at Kiambu District Hospital. She earned a Masters of Science in Health Informatics from Indiana University Purdue University in Indianapolis, Indiana. In addition, she completed post-doctoral training in informatics at Regenstrief Institute in Indianapolis, Indiana, and a residency in diagnostic radiology at Indiana University. Prior to arriving at Emory, she completed a fellowship in interventional radiology at Oregon Health Sciences University in Portland, Oregon. Drawing upon extensive experience with open source communities and contextual knowledge in Africa, Dr. Gichoya hopes to leverage her skills to build capacity for data science in Africa. Dr. Gichoya's research interests include studying clinical disparities for minimally invasive procedures, validating machine learning models for health in real clinical settings, exploring explainability, fairness, and a specific focus on how algorithms fail. She has worked on the curation of datasets for the SIIM (Society for Imaging Informatics in Medicine) hackathon and ML committee. She volunteers on the ACR and RSNA machine learning committees to support the AI ecosystem to advance development and use of AI in medicine.

Mollie Hobensack, MPhil, BSN, RN, is a PhD Candidate of Nursing Informatics at Columbia University School of Nursing. She is funded by the National Institute of Nursing Research T32 Grant, Reducing Health Disparities Through Informatics (T32NR0769) and by the Jonas Scholarship. Prior to beginning her PhD program, she clinically worked as a bedside nurse on a geriatric inpatient unit. She is mentored by Dr. Maxim

Topaz and her dissertation is focused on incorporating social risk factors extracted using natural language processing into predictive models to prevent hospitalization in the home healthcare setting.

Lisa Howley, PhD, Med is an experienced Educational Psychologist who has spent over 20 years in the field of medical education supporting learners and faculty, conducting research, and developing curricula. She joined the AAMC in 2016 to advance the continuum of medical education, support experiential learning, and curricular transformation. Prior to joining the AAMC, she spent eight years as the Associate DIO and AVP of Medical Education and Physician Development for the Carolinas HealthCare System in North Carolina. In that role, she led a number of medical education initiatives across the professional development continuum, including graduate medical education accreditation, as well as physician leadership development for the large integrated healthcare system. She concurrently served as Associate Professor at the University of North Carolina School of Medicine, where she led curriculum and faculty development. She also held a faculty appointment in educational research at UNC-Charlotte where she taught social science research methods, led and collaborated on numerous studies of effective education. From 1996 to 2001, she was a member of the medical education faculty at the University of Virginia School of Medicine where she designed and led performance based assessments and simulation-enhanced curricula. She received her Bachelor's degree in Psychology from the University of Central Florida, and both her Master of Education and Ph.D. in Educational Psychology from the University of Virginia.

Cornelius James, MD, is a Clinical Assistant Professor in the Departments of Internal Medicine, Pediatrics and Learning Health Sciences at the University of Michigan (U-M). He obtained his medical degree from Wayne State University School of Medicine, and subsequently completed a combined Internal Medicine and Pediatrics residency at Beaumont Health, where he served as a chief resident during his final year of training. He is a primary care physician, practicing as a general internist and a general pediatrician.

Dr. James has served in many educational roles across the continuum of medical education. He has led successful revamps of evidence-based medicine curricula for the U-M medical school, and for the U-M internal medicine residency program. As a Division of General Medicine Education Liaison, he led efforts to ensure that the teaching and learning experiences of faculty, residents and students in U-M general medicine clinics were effective and efficient. While serving as a Doctoring faculty he established longitudinal coaching and mentoring relationships with medical students and taught them foundational clinical skills. Dr. James is also serving as the inaugural Diversity, Equity, Inclusion and Anti-Racism Associate Program Director for the U-M internal medicine residency program.

Dr. James also serves on local and national education committees. As a member of the Society of General Internal Medicine Education Committee he leads a workgroup assembled to ensure that the committee's work is viewed through an anti-racism lens.

In multiple years Dr. James has been identified as one of the top 50-60 teachers in the Department of Internal Medicine (determined by medical student and resident evaluations). In addition, in 2022 he received the pre-clinical Kaiser Permanente Excellence in Teaching award, the most prestigious teaching award given by the U-M medical school.

Dr. James has completed several local and national programs to enhance his skills as an educator. For example, he was a 2021 American Medical Association (AMA) Health Systems Science Scholar. Dr. James was also one of ten inaugural 2021 National Academy of Medicine (NAM) Scholars in Diagnostic Excellence. As a NAM scholar, he began working on the Data Augmented, Technology Assisted Medical Decision Making (DATA-MD) curriculum. The DATA-MD curriculum is designed to teach healthcare professionals to use artificial intelligence (AI) and machine learning (ML) in their diagnostic decision making. Dr. James is also leading the DATA-MD team as they develop a web-based AI/ML curriculum for the AMA.

He is very interested in curriculum development, and teaching learners to provide evidence-based, data-driven, equitable, patient-centered care. His research interests include clinical reasoning, implementation of AI/ML curricula across the continuum of medical education, and implementation of digital tools into clinical practice..

Pamela Jeffries, RN is an internationally recognized leader and researcher in nursing and health care education, with a reputation for innovation in teaching strategies, experiential learning, new pedagogies and the use of technology. She became the ninth dean of Vanderbilt University School of Nursing on July 1, 2021.

Dean Jeffries has been principle investigator on federal, state and organization grants from entities such as the National Institute of Health, Health Resources and Service Administration, National League for Nursing and the National Council of State Boards of Nursing. She is recognized for the development of the NLN Jeffries Simulation Theory, considered the major contribution to simulation scholarship.

Prior to being named VUSN dean, she served as the second dean of the George Washington University School of Nursing. In her six-year tenure, she expanded the infrastructure and processes and standards for the emerging school, leading it through a significant period of growth. Before joining George Washington University, she had a series of progressively responsible leadership roles at The Johns Hopkins University, where she was professor of nursing, associate dean for academic programs and vice dean of faculty for the School of Nursing before being appointed vice provost for digital initiatives for the university.

Dean Jeffries is a popular national and international speaker who has also served as a consultant on clinical education, simulations and other emerging technologies. She has published extensively and is the editor of four books, *Simulations in Nursing Education: From Conceptualization to Evaluation* (3rd edition), *The NLN Jeffries Simulation Theory Monograph*, *Developing Simulation Centers Using the Consortium Model* and *Clinical Simulations in Nursing Education: Advanced Concepts, Trends, and Opportunities*.

Dean Jeffries is a fellow of the American Academy of Nursing (FAAN), fellow of the Society for Simulation in Healthcare Academy (FSSH), fellow of the Academy of Nurse Educators (ANEF), inductee into the Sigma Theta Tau International Research Hall of Fame, and recipient of the American Association of Colleges of Nursing Scholarship of Teaching and Learning Excellence Award. She is also a Robert Wood Johnson Foundation Nurse Executive Fellow. She is active in a variety of professional organizations, including the National League for Nursing and Society for Simulation in Healthcare, Global Network for Simulation in Healthcare (GNSH), and currently serves on the Board of Directors of the American Academy of Nursing and GNSH.

Kimberly Lomis, MD, is Vice President for Undergraduate Medical Education Innovations at the American Medical Association. In that capacity, she guides the Accelerating Change in Medical Education (ACE) consortium of 37 medical schools, impacting approximately 25,000 medical students across the United States. Dr. Lomis is invested in competency-based medical education. She previously served as Associate Dean for Undergraduate Medical Education at Vanderbilt University School of Medicine, where she guided a major revision of the medical school curriculum that included implementation of a comprehensive competency-based assessment program. Dr. Lomis also served as director of the national pilot of the Association of American Medical Colleges Core Entrustable Professional Activities for Entering Residency. Dr. Lomis trained in general surgery at Vanderbilt University Medical Center from 1992-1997 and practiced until 2012. She retains appointment at Vanderbilt as adjunct Professor of Surgery and of Medical Education & Administration.

Dallas Peoples, Program Specialist, Transforming Medical Education, is Program Specialist for Transforming Medical Education at the AAMC. She is responsible for assisting in the development, planning, implementation, and tracking of new initiatives and projects in competency-based medical education and interprofessional and collaborative education. Dallas is also responsible for facilitation of the AAMC's Medical Education Senior Leaders' Anti-Racism Taskforce efforts.

Prior to taking this role in June of 2022, Dallas was Education Coordinator at UT Southwestern Medical Center for 4 years. She managed and coordinated UME programs in the Department of Family & Community Medicine for 3 years, and GME research programs in the Simmons Comprehensive Cancer Center for 1 year. Dallas earned a Bachelor of Science in Sociology from Texas Woman's University, a Master of Science in Sociology from Texas A&M University-Commerce, and is currently pursuing a PhD in Sociology with a concentration in Health & Illness at Texas Woman's University. Her research uses a qualitative methodological lens on concerns with health inequities, social determinants, and intersectionality. Her primary areas of focus are medical education, environmental health, and reproductive health. Dallas also teaches Health & Illness, an

undergraduate level course in the department of Social Sciences & Historical Studies at Texas Woman's University.

Javaid Sheikh, MD, is an internationally renowned medical executive and creative thought leader in global academic medicine. Since beginning his tenure as dean of Weill Cornell Medicine-Qatar (WCM-Q) in 2010, Dr. Sheikh has pioneered and implemented innovative biomedical educational and research programs enabling WCM-Q to become widely acknowledged as a leading institution preparing “global physician-scientists” for the 21st century, equipped with the skills, knowledge and outlook to provide exceptional standards of healthcare while also driving advances in scientific discovery.

In addition, Dr. Sheikh led the establishment of a comprehensive research infrastructure at WCM-Q equipped with core laboratories with advanced capabilities in genomics, proteomics, transcriptomics and metabolomics, making the college a valuable national resource and turning Doha into a regional and global hub for cutting-edge scientific enquiry and international collaboration.

To support the ongoing professional development of healthcare practitioners, Dr. Sheikh established a Division of Continuing Professional Development at WCM-Q that was the first such program in the region to be accredited by the US Accreditation Council for Continuing Medical Education (ACCME), a very important step in maintaining world-class physician performance and delivery of high quality medical care.

Further, Dr. Sheikh has also led the conceptualization and implementation of comprehensive programs to advance health promotion and disease prevention for the general population of Qatar by cultivating healthy behaviors in school-age children, and by designing and conducting population-based, longitudinal studies to assess the efficacy of these interventions.

Most recently, Dr. Sheikh has launched a digital health program at WCM-Q, with a curricular component based on data science/machine learning, in collaboration with Carnegie Mellon University-Qatar and Qatar Computing Research Institute.

Dr. Sheikh also co-founded Innovations in Global Health Professions Education (<https://www.innohealthed.com/>), a globally interconnected forum providing an international platform for profiling conceptual and technological innovations in health professions education. He also serves on the Artificial Intelligence in Health Professions Education forum of the National Academy of Medicine in the US. Prior to joining WCM-Q, Dr. Sheikh built a distinguished career as a professor of psychiatry and behavioral sciences, associate dean, and chairman of the board at the Palo Alto Institute for Research and Education at Stanford University School of Medicine and affiliated hospitals in California.

Carl Sheperis, PhD, MS, is the Dean at Texas A&M San Antonio. Previously Dr. Sheperis was interim President and CEO of the National Board for Certified Counselors, Inc. and Affiliates (NBCC) and its division, NBCC International (NBCC-I). Headquartered in Greensboro, North Carolina, the NBCC is the preeminent certification agency for professional counselors in the United States. It has certified more than 64,000 counselors and provides licensure examinations for all 50 states, the District of Columbia, Puerto Rico, and Guam. Dr. Sheperis completed his undergraduate studies at Kutztown University of Pennsylvania, earned a Master of Science in Education in 1994 from Duquesne University and his doctorate in mental health counseling in 2001 from the University of Florida. He is a National Certified Counselor (NCC), Certified Clinical Mental Health Counselor (CCMHC), Master Addictions Counselor (MAC), Approved Clinical Supervisor (ACS), and Licensed Professional Counselor (LPC), as well as a past NBCC Board Chair. Before joining the NBCC full time in April 2018, he was Program Dean for the College of Social Sciences at the University of Phoenix, and earlier served at Lamar University in Beaumont, Texas, where he was Chair of the Counseling and Special Populations Department and led the largest state university system counseling program in the United States. Dr. Sheperis has been President of the Association for Assessment and Research in Counseling and an Associate Editor for the Journal of Counseling and Development, as well as serving as Editor of the Journal of Counseling Research and Practice. He also has worked with the American Counseling Association (ACA) as Chair of the Research & Knowledge Committee.

Speaker Bios

Areeba Abid is an MD candidate at the Emory University School of Medicine. She received her Bachelor's in Biomedical Engineering from Georgia Tech, and worked as a software engineer at Google before medical school. She also worked as an engineer at Abbott, Cardinal Health, and multiple startups. She is excited about innovation in medical technology, particularly machine learning and process improvement. She co-founded MedAI, an organization developing AI curricula for medical trainees. In her free time, she likes to build things, play soccer, and karaoke.

Kelly Aldrich DNP, MS, RN-BC, FHIMSS is a board-certified Informatics Nurse Specialist and has served for over 35 years in clinical, academic, and leadership roles recognized as a senior informatics leader, innovator, and advocate for useful, safe, and effective healthcare transformation. She is an Associate Professor and Director of Informatics Innovation for the Vanderbilt School of Nursing with a secondary appointment in the Department of Biomedical Informatics.

Dr. Aldrich spent the first twenty years of her career at the bedside in cardiac and trauma critical care settings. Driven by a passion and dedication to create a seamless patient-centered care environments supported by functional technology, she pursued further academic training in informatics and executive leadership. She is the former Chief Clinical Transformation Officer for Center for Medical Interoperability; a non-profit organization led by health systems to simplify and advance data sharing among medical technologies and systems. Prior to that, she served as the invited inaugural Chief Nursing Informatics Officer for HCA Healthcare where she successfully created clinical informatics strategic and tactical roadmaps for implementing meaningful and innovative solutions at scale.

She is engaged in research and informatics innovation learning models reflective in publications advocating for the unique nurse identifier and Digital RN citizen model. Other publications include Informatics for Nursing documentation standards, her model for Blending Education Leadership and Technology (BELT) for highly reliable technology systems in innovation, Interoperability for Better Care, the ANA Nursing Informatics Scope and Standards of Practice revision and most recently her current work with the CDC on Healthcare Trust Data Platforms demonstrating automation of PPE data in burn and predictive needs for the nation.

With her background in informatics, technology, and innovation and as a Fellow with HIMSS, Dr. Aldrich proudly represents the nursing perspective on HHS/ONC task forces focused on interoperability experience, standards, and contributes to industry advisory councils including HHS National Cybersecurity Future Gazing, Baxter Healthcare Digital Health, and the ANA Innovation Advisory Committee. Additionally, owns and manages an informatics consulting company.

She received her Master of Science in Healthcare Systems Leadership and Nursing Informatics and Doctor of Nursing from the University of South Florida.

Eduardo Bunge, PhD, MS, is Professor in the department of Psychology at Palo Alto University and Director of the Master of Science in Psychology. He was born and educated in Argentina, earned his undergraduate degree at the University of Buenos Aires, and received his Ph.D. in psychology from the University of Palermo (Argentina).

Dr. Bunge currently directs the Children and Adolescents Psychotherapy and Technology (CAPT) Research Lab, and is Associate Director for the International Institute of Internet Interventions for Health at Palo Alto University. He has published five clinical books in three languages (English, Spanish, Portuguese), and more than 40 articles in peer reviewed journals and chapters.

Has been teaching in the Master in Science program since 2013 and is highly passionate about how technology can contribute to high quality education and advancing the field of Mental Health.