

Artificial Intelligence in Health Professions Education

National Academies' Keck Center, Room 100 500 Fifth Street, NW, Washington, DC 20001

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 15: Opening Hybrid Session [The What]

AI Considerations in the Adoption of AI in HPE

Session Objective: To discuss educational content for exploring social, cultural, policy, legal and regulatory considerations with learners

	Recommended Reading:
4:00pm	 Artificial intelligence in medicine: Overcoming or recapitulating structural challenges to improving patient care? Assessing the Economic Value of Clinical Artificial Intelligence: Challenges and Opportunities Welcome from Workshop Chair
	Carole Tucker, Workshop Chair & Associate Dean of Research, School of Health Professions, University of Texas Medical Branch, Galveston
	AI Considerations
	Explore social, cultural, policy, legal and regulatory considerations with learners of AI as a tool and as content within health professions education
	 Moderator: Kimberly Lomis, Vice President, Undergraduate Medical Education Innovations American Medical Association Ashyana-Jasmine Kachra, Public Policy Associate, Holistic AI Nathaniel Hendrix, Researcher and data scientist, American Board of Family Medicine
	• Alex John London, Director, Center for Ethics and Policy, Carnegie Mellon University
	Discussion
5:30pmET	Adjourn

March 16: Hybrid Workshop Sessions

[The How]

Embedding AI within Health Professions Education

Session Objective: To explore applications of AI within health professions education and AI competencies that cut across all health professions

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	Opening from Workshop Chair
	Carole Tucker, Workshop Chair & Associate Dean of Research, School of Health Professions, University of Texas Medical Branch, Galveston
	Providing Education in AI
	Required Reading: Competencies for the Use of Artificial Intelligence–Based Tools by Health care Professionals
9:00amET	Emerging competency models for AI in health professions
	Facilitator: Kimberly Lomis, Vice President, Undergraduate Medical Education Innovations American Medical Association
	Bonnie Miller , fmr Senior Associate Dean for Health Sciences Education at Vanderbilt University School of Medicine and Executive Vice-President for Educational Affairs at Vanderbilt University Medical Center
9:30am	Bridging Competencies with Education & Practice
	• Facilitated discussion with audience
10:00am	10 min break – move to breakout groups
	Breakout Groups
	• In-person:
	• Room 101
	• Room 102
	• Virtual audience: Listen to students/trainees** explore AI in health professions education and competencies
	**Facilitator: Mollie Hobensack, PhD Candidate, Nursing Informatics, Columbia University
	Learner panelists:
	Noahlana Monzon, CPMA Nutrition Student, University of Oklahoma
	Dallas Peoples, PhD Candidate in Sociology, Texas Woman's University
	Winston Guo, MD Candidate, Weill Cornell Medical College
	Gabrielle Robinson, PhD Student in Medical Clinical Psychology, Uniformed Services University of the Health Sciences

	Alonzo D. Turner, PhD Student, Counseling and Counselor Education, Syracuse
	University & 2022 NBCC Doctoral Minority Fellow
	Erkin Otles, MD/PhD Student, University of Michigan
10:10am	Breakout Groups
	• Review the list of six competency domain statements and 25 sub-competencies
	• Consider opportunities in existing contexts related to clinical reasoning, evidence-based medicine/practice, documentation, ethics, etc.
	Questions to guide the discussion
	1. Do these competencies resonate with your profession or educational practice? Why or why not? How might these apply to interprofessional education and collaborative practice?
	2. How might we integrate AI outcomes or competencies into current local health professions educational programs or existing curricula? What barriers exist and how might we address them?
	3. What might be some challenges and opportunities at your institution to
	incorporating/adopting the competencies into IPE education?
11:10am	Close breakouts – return to main room
11:15am	Share ideas
	Facilitator: Kimberly Lomis, Vice President, Undergraduate Medical Education Innovations American Medical Association
	Share adapted lists and how we can start incorporating key concepts into existing programs (in addition to beginning development of more formal educational interventions
	Closing: Carole Tucker, Workshop Chair & Associate Dean of Research, School of Health Professions, University of Texas Medical Branch, Galveston
12noonET	Adjourn – stay tuned for closing session in April

ADDITIONAL RESOURCES

USING Z CODES: The Social Determinants of Health (SDOH) Data Journey to Better Outcomes Direct link: <u>https://www.cms.gov/files/document/zcodes-infographic.pdf</u>

Artificial Intelligence in Health Care: The Hope, the Hype, the Promise, the Peril Direct link: <u>https://nam.edu/artificial-intelligence-special-publication/</u>



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, Galvasten. 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 (3nd 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.

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 Pennsylvia, 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

Winston Guo, MD Candidate, is a third-year MD student at Weill Cornell Medical College. He previously studied computer science and obtained research experience in labs that use basic, clinical, and computational approaches. He is now interested in the applications of machine learning in clinical spaces (eg informing diagnosis and treatment decisions), preventive health, and healthcare access.

Nathaniel Hendrix, PharmD, PhD, is a researcher and data scientist with the American Board of Family Medicine and their Center for Professionalism and Value in Health Care. His research focuses on cost-effectiveness analysis, pharmacoepidemiology, and artificial intelligence in primary care. Previously, he got his PharmD from the University of Washington School of Pharmacy, and his PhD from UW's Comparative Health Outcomes, Policy, and Economics (CHOICE) Institute, and completed a postdoc at the Harvard T.H. Chan School of Public Health.

Ashyana-Jasmine Kachra is a Public Policy Associate at Holistic AI, specializing in AI regulation and responsible AI practices. Prior to this she completed her MSc in International Public Policy from the London School of Economics and has a background in Political Science. Outside of Holistic AI, she is also currently working with Open AI's Policy Research Team and hopes to continue her work in contributing in a safer, ethical AI for all!

Alex John London, PhD, is the Clara L. West Professor of Ethics and Philosophy and Director of the Center for Ethics and Policy at Carnegie Mellon University. An elected Fellow of the Hastings Center, Professor London's work focuses on ethical and policy issues surrounding the development and deployment of novel technologies in medicine, biotechnology and artificial intelligence, on methodological issues in theoretical and practical ethics, and on cross-national issues of justice and fairness. His book, For the Common Good: Philosophical Foundations of Research Ethics is available in hard copy from Oxford University Press and is available here in PDF as an open access title. His papers have appeared in Mind, The Philosopher's Imprint, Science, JAMA, The Lancet, The BMJ, PLoS Medicine, Statistics In Medicine, The Hastings Center Report, and numerous other journals and collections. He is also co-editor of Ethical Issues in Modern Medicine, one of the most widely used textbooks in medical ethics.

Bonnie Miller MD, is a Professor of Medical Education and Administration Vanderbilt University School of Medicine. She attended Colorado College for her undergraduate education, earning a Bachelor of Arts in Biology in 1976. She received her M.D. degree at the University of Oklahoma, graduating in 1980. She then moved to Nashville for six years of post-graduate training in general surgery at Vanderbilt University Affiliated Hospitals. During this time, she spent 18 months doing basic research in surgical nutrition and the metabolic response to injury. After completing her residency, she spent one year in Seattle in fellowship in hepato-biliary disease at the Virginia Mason Clinic. Since 1987, Dr. Miller has been back in Nashville.

For 11 years, she served as a surgeon in private practice at one of the Vanderbilt-affiliated teaching hospitals, where she worked with residents and students. She then spent one year working as a staff surgeon at the Nashville Veteran's Administration Medical Center before assuming the role

of Associate Dean for Medical Students at Vanderbilt in June 1999. Although she loved the triumphs and trials of student affairs, she was drawn to the challenges facing medical education in the 21st century, and moved to her current position in January 2005.

Dr. Miller's clinical interests were focused on patients with breast cancer. Her academic interests include the moral development of physicians and the structure and function of curriculum committees.

Noahlana (Lana) Monzon, is a first-year student in the Nutritional Sciences MA/MS Program at the University of Oklahoma Health Sciences Center. She has an undergraduate degree in Biomedical Engineering from the University of Arkansas. Lana currently serves as the Unity Clinic Nutrition Representative Liaison and committee member for Interprofessional outreach response group. With a passion for improving patient outcomes through technology, communication, and nutrition, Lana's master's thesis focuses on the Development of a Nutrition Communication Efficacy Scale to be used in interprofessional care settings.

Erkin Otles is a Medical Scientist Training Program Fellow (MD-PhD student) at the University of Michigan. I have completed the first three years of my medical school training and currently I am in my second year of my PhD work. My research interest lies in creating machine learning and artificial intelligence tools for patients, physicians, and health systems. Most of my work focuses on the development, deployment, and prospective validation of dynamic health outcome prediction models (e.g. early warning systems). I am co-advised by Brian Denton (Industrial and Operations Engineering) and Jenna Wiens (Computer Science and Engineering). I have a professional background in health IT development and hold a Master's of Engineering from the University of Wisconsin. After completion of my MD-PhD training, I plan on pursing medical residency training in emergency medicine.

Gabrielle Robinson, PhD is a student in medical clinical psychology at the Uniformed Services University of the Health Sciences.

Alonzo D. Turner, PhD Student, is currently a doctoral student pursuing a PhD in Counseling and Counselor Education at Syracuse University. He is a 2022 NBCC Doctoral Minority Fellow, National Certified Counselor (NCC), and a Licensed Clinical Mental Health Counselor and a Qualified Supervisor with several years of providing counseling services for clients of multicultural backgrounds. His research agenda focuses on include intersectional feminism, Womanist theology, multiculturalism and examining how the experiences of Black millennials in Black church culture impact their religiosity and spirituality. He is committed to addressing cultural attitudes that perpetuate stigmas regarding mental health services in the Black community. His aim is to use his research to bridge the gap between counselor educators and the Black community. Through his research, he aims to enhance current pedagogic, clinical, and supervisory practices and literature regarding spirituality and religiosity for clients of historically marginalized backgrounds.