On the Intersection of Ethics, Data Science, Informatics, and Epidemiology

March 20, 2025
10:00am - 1:45pm
SPEAKER BIOGRAPHIES

Marjorie Gondré-Lewis, PhD – MPI, GHUCCTS; Associate Director, GHUCCTS KL2 Scholars Program; Associate Dean Faculty Development, Howard University College of Medicine; Chief JEDI Officer, Howard University College of Medicine. Marjorie C. Gondré-Lewis, Ph.D. is an MPI of the Georgetown-Howard Universities Center for Clinical Translational Science (GHUCCTS) and Associate Director of the GHUCCTS KL2 Scholars Program. As a PI, she helps lead translational innovations for transformative health approaches in our region and nationally. She is also the Associate Dean (I) of Faculty Development, and Chief Justice, Equity, Diversity, and Inclusion (JEDI) Officer at the Howard University College of Medicine. In this capacity, she develops programs that promote faculty career development and advancement, and a culture that values, supports, and enhances Diversity, Equity, Inclusion through the lens of Justice in all professional relationships.

Dr. Gondré-Lewis' Developmental NeuroPsychoPharmacology Laboratory investigates mechanisms of drug addiction and the brain reward pathways impacted in neuropsychiatric disorders. Her work also focuses on the developmental impact of early life stress and toxic stress exposure on later onset of neuropsychiatric disorders and substance use disorder (SUD) involving alcohol, nicotine and opioids. The Clinical Translational arm of her research addresses health disparities that result from negative social determinants of health and ancestry-specific genetic variations not considered in treatment strategies. These are significant barriers to achieving brain health in the African American community, and the goal is to develop personalized solutions that will promote health equity for underserved populations. Co-morbidities such as SUD, HIV, and other chronic disorders exacerbate the impact on mental and behavioral health. The ultimate long-term goal of our research is to promote Brain Health in underserved communities with considerations for ethnicity-specific genomic variations. Her latest approach is to leverage data science and Cell Biology to students in the Graduate and Health Sciences schools and serves on and machine learning to enhance knowledge about brain health in the community. Importantly, Dr. Gondré-Lewis serves as mentor to scientists at all stages of their career and is devoted to training and nurturing the next generation of researchers locally and nationally. She teaches Neuroscience school-wide, national and international committees and groups.

Betelihem Tobo, PhD, is a public health expert and epidemiologist dedicated to social justice, health equity, and data integrity. She is committed to making health-promoting systems, supportive services, and healthcare more accessible for all.

Dr. Tobo currently oversees research projects at Howard University's College of Medicine and also serves as an Assistant Professor, teaching and mentoring future healthcare professionals. Previously, she led the Statistics and Data Science Core at Howard's Centers of Excellence, using data and research to address health disparities in Washington, DC's high-priority health issues.

She earned her Ph.D. in Public Health Studies (Epidemiology) from Saint Louis University. Her research focuses on how social and economic factors—including income, education, and neighborhood conditions—affect people's health. She has also contributed to major national projects, including a federally funded initiative aimed at reducing bias in health data and improve research capacity at Howard.

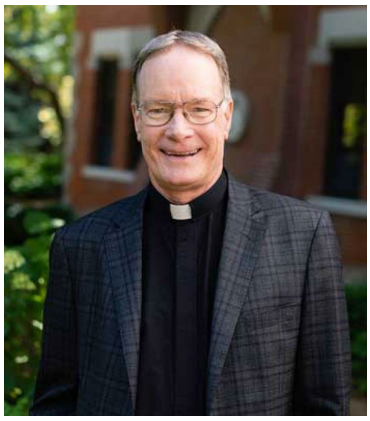
Through her work, Dr. Tobo seeks to bridge science, policy, and community health to work toward a world where everyone has a fair chance at living the healthiest possible life.

Kenneth W. Goodman, PhD, is a Professor of Medicine at the University of Miami, where he holds additional appointments in the Departments of Philosophy, Public Health Sciences, and the School of Nursing and Health Studies. He is the founder and director of the University's Institute for Bioethics and Health Policy and co-directs the Ethics Programs, which have been designated as a World Health Organization Collaborating Center in Ethics and Global Health Policy, the only one of its kind in the United States.

Dr. Goodman's interdisciplinary research focuses on the ethical dimensions of health information technology, epidemiology, and public health. He has authored many influential publications, including a book titled *Ethics, Medicine, and Information Technology: Intelligent Machines and the Transformation of Health Care*, which examines the ethical challenges posed by advancements in biomedical informatics. In addition to his academic roles, he chairs the UHealth/University of Miami Hospital Ethics Committee and the Adult Ethics Committee for Jackson Memorial Health System, contributing significantly to the development of ethical guidelines in clinical and research settings.

Dr. Goodman's academic background spans multiple disciplines. He earned a Ph.D. in Philosophy from the University of Miami, an M.A. in Theoretical Linguistics from the University of Essex, and a B.S. in Journalism and Communication from the University of Florida (amia.org). His early research in computational linguistics and machine translation laid the foundation for his later focus on bioethics and medical informatics. He has also contributed extensively to the ethics of artificial intelligence, public health data governance, and evidence-

based medicine, reinforcing his leadership in shaping ethical policies for emerging health technologies.



Kevin T. FitzGerald, S.J., Ph.D., Ph.D., is the John A. Creighton University Professor and chair of the Department of Medical Humanities in the School of Medicine, at Creighton University. He received a Ph.D. in molecular genetics, and a Ph.D. in bioethics, from Georgetown University. His research efforts focus on the utilization of the Humanities in medical education, on the investigation of abnormal gene expression in cancer, and on ethical issues in biomedical research and medical genomics. He has published educational, scientific, and ethical articles in peer-reviewed journals, books, and in the popular press.

Fr. FitzGerald has given presentations nationally and internationally, and often been interviewed by the news media, on such topics as human genetic engineering, cloning, stem cell research, and personalized medicine. He has served on many advisory committees for healthcare organizations, the U.S. government, and international organizations, including having been a Corresponding Member of the Pontifical Academy for Life since 2005.

Peter McGarvey, PhD., is the Director of the Innovation Center for Biomedical Informatics (ICBI) and a Professor in the Department of Biochemistry and Molecular & Cellular Biology at Georgetown University Medical Center (GUMC). He also serves as Co-Director of the MedStar-Georgetown Collaborative Center for Artificial Intelligence in Healthcare Research and Education **AI CoLab** and Scientific Director of AI in Genomic Bioinformatics at MedStar Health Research Institute. With extensive experience in bioinformatics, AI-driven biomedical research, and computational biology, Dr. McGarvey specializes in genomic and proteomic analysis, biological databases. His work integrates artificial intelligence and machine learning, synthetic data generation, and multimodal data integration to enhance precision medicine, biomarker discovery, and translational research.

At ICBI and GUMC, he manages large NIH-funded projects, including the Clinical Proteomics Tumor Analysis Consortium (CPTAC) Data Center and Assay Portal, the Protein Information Resource, the UniProt Knowledgebase. His work focuses on developing scalable AI methodologies for multi-omics integration, data harmonization, and advanced data interoperability to drive next-generation biomedical insights.

Dr. McGarvey holds a PhD in Biological Sciences from the University of Michigan and an MS in Technology Management from the University of Maryland University College. His expertise aligns with national priorities in AI for biomedical research, data-driven healthcare innovation, and the ethical deployment of synthetic data in clinical applications.

Assya Pascalev, Ph.D., is an Associate Professor of Philosophy at Howard University, where she directs the Interdisciplinary Bioethics Program and serves as Ethics Co-Director for the Georgetown-Howard Universities Center for Clinical and Translational Science (GHUCCTS). She is the founding director of the Bulgarian Center for Bioethics and a book series editor for Perspectives in Bioethics at Trivent Publishing. Dr. Pascalev specializes in biomedical ethics, research ethics, and the ethical implications of emerging technologies such as artificial intelligence and big data in health research.

Her research explores how ethical frameworks shape medical decision-making, particularly in end-of-life care. In *Is Death the Enemy? The Normative Power of Metaphor in Bioethics*, a chapter she wrote in a published series titled "Applied Ethics: From Bioethics to Environmental Ethics," she analyzes the moral weight of metaphors in medicine, demonstrating how language shapes physician attitudes and decisions in critical care settings. Her work has broad applications for clinical ethics, AI in healthcare, and research integrity. Dr. Pascalev has authored over 50 publications on these topics and serves on the National Association for Clinical and Translational Science. Through her leadership and scholarship, she advances ethical discourse in medicine, biotechnology, and public health policy.