

Wake Forest Journal of Law Policy Presents:
***The Legal Implications of Artificial
Intelligence and Health Care***
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Panelists

David Senter

David Senter is a partner at Smith Anderson law firm in Raleigh, NC. David focuses his practice on data privacy matters, regularly advising technology companies and healthcare providers on all matters pertaining to privacy and data security, including contract review and negotiation, breach investigation, notification and reporting, and compliance with state, federal and foreign privacy and data security laws such as HIPAA, FERPA, CCPA, GDPR and PIPL. Having served as the Interim Associate Compliance Officer and Director of Privacy of an academic medical center in North Carolina, he offers a unique business perspective for clients that blends awareness of the intricacies of relevant laws with practical advice. Has designed and managed privacy compliance training infrastructure, prepared and revised privacy and information-related policies, procedures and external-facing documentation and managed breach investigation triage and response. He regularly counsels clients in connection with health information management, data use and other vendor contract negotiation and execution. David earned a B.A. from Wake Forest University and a J.D. from Wake Forest University School of Law.

Amol Joshi

Dr. Amol Joshi is the Thomas H. Davis Professor in Business at Wake Forest University. He also holds a joint faculty appointment as an Associate Professor of Strategic Management in the WFU School of Business and as an Associate Professor of Innovation & Commercialization in the WFU School of Medicine.

Dr. Joshi is an inventor who helps others reinvent themselves. His passion is guiding aspiring entrepreneurs, executives, and students of all levels to pursue their business dreams. He has trained startup founders, corporate managers, and industry leaders in the US, Austria, Denmark, and Vietnam.

A recognized expert on innovation, his interdisciplinary research examines how inventors create and commercialize new technologies. With a 13-year prior career as an engineer and entrepreneur in venture capital-funded startups in Silicon Valley, Dr. Joshi co-invented two patents for AI-based voice assistant products. He co-founded BeVocal, a speech recognition software startup acquired by Nuance Communications, and served as VP of Sales & Marketing from 1999 to 2003. Dr. Joshi's current research focuses on analyzing the

adoption of AI technologies by health systems for the early detection and diagnosis of chronic diseases. Through the National Academies of Sciences, Engineering, and Medicine, he has advised Federal agencies including NASA, NSF, NIH, and the Department of Energy on national innovation policies and R&D grant programs for U.S. small businesses.

At Wake Forest, Dr. Joshi leads and teaches graduate courses in Global Strategic Management (MBA Program) and Innovation Management (MS in Translational Biotechnology Program).

Dr. Joshi earned a PhD in Business Administration from UNC Chapel Hill, an MBA and MS in Engineering Sciences from Dartmouth College, and a BS in Electrical Engineering from Georgia Tech with highest honors.

Tafline Arbor

Dr. Arbor is an Assistant Professor with a specialty in General Internal Medicine at Wake Forest University School of Medicine.

Patricia Corn

Patricia (Pat) Corn is part of the Advocate Health Compliance & Integrity Department serving as the director of strategy and innovation. In her role, Pat provides compliance support for Advocate Health in its research and innovation efforts. Since much of the innovative work that Advocate Health does involves data, her role includes supporting the organization's efforts while providing the necessary data protections to keep the organization's data safe. Pat began her career as a staff nurse over 30 years ago at North Carolina Baptist Hospital, which was the original hospital at Wake Forest Baptist Medical Center, and has held several roles in case management and risk management prior to moving into the compliance space.

Andrew McWilliams

Andrew (Andy) McWilliams, MD, MPH is a member of the IT Medical Informatics team supporting Advocate Health and serves as co-chair of the Enterprise Artificial Intelligence Committee. Prior to this role, he co-led the Center for Outcomes Research and Evaluation (now the Wake Forest Center for Health System Science). CORE's multidisciplinary team leveraged data-driven research to generate real-world evidence and focused on solving problems critical to the healthcare system. As a clinician investigator, Dr. McWilliams' research interests are in leveraging pragmatic methodologies to evaluate the effects of emerging technologies and novel care paradigms on quality, costs, and patient outcomes. He is a graduate of UNC-Chapel Hill Schools of Medicine and Public Health and is board certified in Internal Medicine, Pediatrics, and Clinical Informatics.

Andrew Kuzma

Andrew Kuzma, PhD, HEC-C, is a Senior Clinical Ethicist for Advocate Health's Midwest Region. He is the lead ethicist for the team's organizational ethics work and a member of the enterprise level Emerging Tech Ethics Committee. He is also the secretary of the

Bioethics Network of the Upper Midwest (BENUM). Before becoming a clinical ethicist, Dr. Kuzma spent 5 ½ years as a high school teacher.

Sara Gerke

Sara Gerke is an Associate Professor of Law and Richard W. & Marie L. Corman Scholar at the University of Illinois College of Law. Her current research focuses on the ethical and legal challenges of artificial intelligence and big data for health care and health law in the United States and Europe. Professor Gerke is leading several research projects funded by the NIH and the European Union. She has over 60 publications in health law and bioethics, especially AI and digital health. Her work has appeared in leading law, medical, scientific, and bioethics journals, including JAMA, Science, and Nature Medicine.

Before joining Illinois, Professor Gerke was an Assistant Professor of Law at Penn State Dickinson Law and was promoted early to Associate Professor of Law in 2024. Previously, she served as a Research Fellow in Medicine, Artificial Intelligence, and Law at the Petrie-Flom Center for Health Law Policy, Biotechnology, and Bioethics at Harvard Law School, where she oversaw the day-to-day work of the Project on Precision Medicine, Artificial Intelligence, and the Law (PMAIL).

Lindsey Lonergan

Lindsey Lonergan currently serves as the Vice President and Deputy General Counsel of Atrium Health Navicent, a multidisciplinary health system headquartered in Macon, Georgia. In this role, she provides legal advice and services to the health system including Senior Leadership and Hospital Administrators on healthcare operational matters, regulatory and compliance matters, company transactions, and ongoing litigation. Lindsey is also responsible for development and oversight of system contracts for multiple business units and divisions as well as clinical service lines across the enterprise and oversees strategic enterprise risk identification, prevention and management including legal management of internal compliance investigations. Lindsey previously was an Associate at an international law firm and focused her practice on healthcare litigation including Federal and State False Claims Act litigation and OIG/DOJ investigations. In addition, she assisted healthcare providers in general regulatory matters, including fraud and abuse analysis, corporate compliance programs, and HIPAA privacy and security regulations.

Christine Coughlin

Christine Coughlin is a Professor of Law at Wake Forest University School of Law. She also has an appointment in the Wake Forest University Graduate School of Arts and Sciences where she is a core faculty member with the Wake Forest University Center for Bioethics, Health & Society. Her interdisciplinary scholarship, cited in legal, scientific, medical, and educational journals and texts, focuses on the legal, ethical, and policy issues in human subjects research, investigational drugs, and emerging biotechnologies.

Zaneta Robinson

Zaneta Moore Robinson is an Associate Clinical Professor and founding Director of the Intellectual Property Law Clinic at Wake Forest University School of Law, where students provide legal services to entrepreneurs and emerging businesses under her supervision. She is a North Carolina Board Certified Specialist in Trademark Law whose scholarship focuses on the intersections between U.S. trademark law, language, and global culture. Prior to joining Wake Forest Law, Professor Robinson was a Clinical Associate Professor and Director of the Intellectual Property Clinic at the University of North Carolina at Chapel Hill School of Law.

Professor Robinson began her legal career as a business litigator, ultimately settling into a transactional intellectual property practice. She has counseled clients on copyright, trademark, and related intellectual property rights protection and enforcement strategies, while managing domestic and international trademark portfolios for clients in the apparel, cosmetics and skincare, higher education, and technology industries, among others. She also has extensive experience drafting and negotiating contracts that affect intellectual property rights and representing clients before the U.S. Patent and Trademark Office Trademark Trial and Appeal Board. Throughout her career, Professor Robinson has served on nonprofit boards, spoken at conferences, symposia, and continuing education programs, and served as a periodic guest on a broadcast program focused on finances and entrepreneurship.

Professor Robinson earned her JD from Wake Forest University School of Law and her BS from James Madison University. She is a member of the North Carolina State Bar, all North Carolina Federal District Courts, and the Supreme Court of the United States.

Mohammad Moghimi

Mohammad Moghimi is an assistant professor in the Department of Biomedical Engineering. He received his B.Sc. and M.Sc. degrees in Electrical Engineering from K. N. Toosi University of Technology and Amirkabir University of Technology in Tehran, Iran. He obtained his Ph.D. degree in Electrical and Computer Engineering from Montana State University, Bozeman, MT. After finishing his education, Professor Moghimi conducted research studies as a postdoctoral research associate at the University of Wisconsin, Madison, and as a research scientist at Georgia Institute of Technology, Atlanta, GA. Before joining Wake Forest University, he was an assistant professor of Electrical and Biomedical Engineering at Northern Illinois University and Rowan University. His research focuses on wearable devices, medical microsystems and flexible bioelectronics to improve patient outcomes and benefit human health. His group designs, fabricates and characterizes biomedical devices in laboratory-controlled environments. In addition, they verify the capabilities of our devices in clinical settings. The wearable devices are designed for diagnostic, assistive and therapeutic purposes. His group specifically develops wearable patches for early identification of melanoma and for monitoring the signs and symptoms of cardiopulmonary diseases (e.g., congestive heart failure, COVID-19). Professor Moghimi is also the recipient of the NIH Early Career Research (ECR) Award to develop flexible, noninvasive pediatric hearing aids.

Ibrahim Karabayir

Dr. Ibrahim Karabayir has a strong background in artificial intelligence and mathematics, with early research focusing on integral inequalities and quantum calculus. During his PhD at Istanbul University, he shifted his focus to real-world AI applications, notably developing EVGO, an optimizer algorithm that enhances deep neural network training. His work with benchmark datasets like CIFAR, alongside architectures such as AlexNet and ResNet, demonstrated EVGO's superiority over established gradient algorithms like Adam and SGD. Dr. Karabayir conducted cutting-edge research at Wake Forest, UTHSC and Loyola, focusing on critical decision-making problems in cardiovascular diseases, neurodegenerative disorders, surgical outcomes, and microbiome analysis.

Dr. Karabayir excels in developing and implementing novel deep learning architectures and applying advanced AI techniques across diverse domains, including but not limited to CNNs, RNNs, LSTM, ResNet, Diffusion Models, LLMs, Transfer Learning, Boosting algorithms, and Multi-Task Learning. His expertise extends to deploying models on edge devices through techniques like model quantization, pruning, and knowledge distillation.

Dr. Karabayir's current research focuses on cardiovascular diseases, particularly in predicting, detecting, and estimating outcomes such as heart failure, cardiomyopathy, fatal coronary heart disease, and biomarkers like EF, BNP, troponin, and coronary calcium.

His work has been published in prestigious journals/conferences, including IEEE Transactions on Neural Networks and Learning Systems (TNNLS), European Heart Journal DH, Annals of Surgery, American Journal of Obstetrics and Gynecology (AJOG), FASEB, ACC, AHA and AMIA. He is currently a co-investigator on NIH R01 grants exploring ECG-AI for predicting heart failure and cardiomyopathy in childhood cancer survivors. As a principal investigator, he leads several R01 and STTR applications focused on ECG-AI and remote monitoring for heart failure.

Ruth Tisdale

Biography Omitted

Moderators

Ellen Murphy

Ellen teaches legal ethics, including Professional Responsibility courses for JD students and Unauthorized Practice of Law courses for nonlawyer professionals. She is a co-author on several legal ethics texts, a member of the NC State Bar Ethics Committee, and a subject-matter expert for the Multistate Professional Responsibility Exam. She also serves on the ABA's Standing Committee for the Public Protection in the Provision of Legal Services.

Ellen served as Wake Forest Law's first Associate Dean of Strategic Initiatives and first Assistant Dean of Instructional Technologies and Design. An online teacher since 2009, she

was the chief administrative and curricular architect of the school's online Master of Studies in Law, the law school's first fully online degree.

A native of Eastern North Carolina, Ellen has a BS in Agribusiness and is getting an LLM in Agriculture and Food Law at the University of Arkansas (Fayetteville). She is a board member at Blue Ridge Women in Agriculture (BRWIA), a nonprofit that serves the North Carolina High Country.

Prior to joining Wake Forest Law, Ellen was a United States federal appeals court clerk (The Honorable Frank J. Magill, 8th Circuit), a corporate lawyer, and the Executive Director of the Massachusetts Lawyer Assistance Program. She is a 2002 graduate of Wake Forest Law, where she served as Editor in Chief of the law review.

Allyson Gold

Allyson E. Gold is a Professor of Law and Director of the Medical-Legal Partnership (MLP) Clinic at Wake Forest Law, a partnership between Wake Forest Law, Wake Forest Medicine, Legal Aid of North Carolina, and the Downtown Health Plaza, an outpatient clinic of NC Baptist Hospital. Her scholarship analyzes the nexus between property law, health disparities, and health equity.

Keith Robinson

W. Keith Robinson is a Professor of Law at the Wake Forest University School of Law. Professor Robinson is a nationally recognized patent scholar. He researches how legal institutions govern emerging technology. He has commented on issues of intellectual property law in media outlets and given more than seventy presentations around the world on patent law. Thomson Reuters has twice recognized Professor Robinson's articles as the best that year in intellectual property law. His recent work has explored how artificial intelligence may impact obtaining U.S. patents. Robinson's work has been cited in briefs before the U.S. Court of Appeals for the Federal Circuit (the court that hears all appeals in the U.S. arising under the patent laws). The Federal Circuit has also cited his work favorably. His most recent article is published in the Nevada Law Journal. In addition, he has published articles in the Florida Law Review, DePaul Law Review, and the American University Law Review. Robinson graduated from Duke University, earning a BS in electrical engineering. He received his JD, cum laude from Duke University. After law school, he worked for the Washington, DC law firm of Foley & Lardner LLP, where his practice focused on patent law. While at Foley & Lardner, Robinson was an adjunct professor at The George Washington University Law School. Before joining Wake Forest, Professor Robinson was an Associate Professor at the SMU Dedman School of law for ten years where he was an Altshuler Distinguished Teaching Professor, a founding Co-Director of the Tsai Center for Law, Science and Innovation, and Faculty in Residence in Kathy Crow Commons on the campus of SMU.

Raina Haque

Raina Haque is a respected figure in the legal field, specializing in the intersection of law and emerging technologies such as deep neural net models (advanced Artificial Intelligence), genomics, human-computer brain interfaces, blockchain, smart contracts, and digital rights. As a former deep neural network developer at an NMR laboratory at the National Institutes of Health and a business analyst in global portfolio trading technologies at global financial institution, Raina integrates multidisciplinary perspectives, including computer science, operations, and ethics into her work. Her pragmatic approach to legal scholarship and advocacy highlights her commitment to practical, forward-looking solutions that address the complexities of implementing regulation to deployed technologies.

As a law school professor and published researcher, Haque contributes valuable insights into the evolving dialogue around technology and regulation. Her publications, characterized by their foresight into the legal implications of technological innovation, have garnered international recognition, being cited by courts, legislatures, and regulatory bodies around the world. She serves as an expert witness for federal agencies in emerging technology matters. This acknowledgment underscores the relevance and impact of her work on global discussions regarding the regulation of new technologies. Through her teaching and writing, Raina aims to prepare both legal professionals and policymakers for the challenges of navigating and shaping the legal landscape in an era of rapid technological change, advocating for regulation that promotes the public good while fostering innovation.



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