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A Symposium Towards Responsible Biomedical AI



Date:

Friday, October 20, 2023

Time:

9:00AM-1:00PM (Eastern)

Location:

325 Studio, Engineering Design & Innovation Building, Penn State University, University Park, PA 16802

Organizers

- **Dr. Laura Y. Cabrera**, Assoc. Prof. of Engineering Science and Mechanics, and Philosophy; Dorothy Foehr Huck and J. Lloyd Huck Chair in Neuroethics, Penn State University
- **Prof. Sara Gerke**, Asst. Prof. of Law, Penn State Dickinson Law
- **Dr. Daniel Susser**, Assoc. Prof. of Information Science, Cornell University
- **Dr. Jennifer K. Wagner**, Asst. Prof. of Law, Policy, and Engineering & Anthropology, Penn State University

Agenda

- **Opening and Keynote Address**
 - 9:00am Opening Remarks by Jennifer Wagner
 - 9:15am Keynote Address by Neil Richards: “Beyond AI Half-Measures”
- **Session 1**
 - 10:00am Michelle Meyer, “Health AI aversion or appreciation? Four randomized field trials of personalized risk-communication nudges to encourage flu vaccination”
 - 10:10am Kristin Kostick-Quenet, “Computer perception meets AI: Ethical implications for healthcare”
 - 10:20am I. Glenn Cohen, “Legal and Ethical Issues with Generative AI; Issues of Enterprise Liability”
 - 10:30am Moderated Discussion led by Laura Cabrera
- **Break (10:45am-11:00am)**
- **Session 2**
 - 11:00am Jasmine McNealy, “Constructive (Data) Trusts”
 - 11:10am Megan Doerr, “Big Health Data Research and Group Harm: a tool for researchers, access boards, and ethics boards”
 - 11:20am Nicholson Price, “Toward Collaborative Local Governance of Medical AI”
 - 11:30am Moderated Discussion led by Sara Gerke
- **Break (11:45am-Noon)**
- **Session 3**
 - Noon Daniel Schiff, “What Can We Learn from Research and Discourse on Deepfakes?”
 - 12:10pm Jordan Harrod, “What happens when AI fails in the clinic”
 - 12:20pm Laura Cabrera, “Not some magic tool’: Views around synthetic data and ELSI-focused computational checklists for artificial intelligence in medicine”
 - 12:30pm Moderated Discussion led by Daniel Susser
- **Symposium Closing**
 - 12:45pm Closing Remarks by Jennifer Wagner

Sponsors

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Acknowledgment of Collaborators

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About the Scheduled Speakers

Neil Richards, Keynote Speaker

Professor in Law, Washington University in St. Louis, School of Law

Neil Richards is one of the world’s leading experts in privacy law, information law, and freedom of expression. He writes, teaches, and lectures about the regulation of the technologies powered by human information that are revolutionizing our society. Professor Richards holds the Koch Distinguished Professor in Law at Washington University School of Law, where he co-directs the Cordell Institute for Policy in Medicine & Law. He is also an affiliate scholar with the Stanford Center for Internet and Society and the Yale Information Society Project, a Fellow at the Center for Democracy and Technology, and a consultant and expert in privacy cases. Professor Richards serves on the board of the Future of Privacy Forum and is a member of the American Law Institute. Professor Richards graduated in 1997 with graduate degrees in law and history from the University of Virginia and served as a law clerk to both William H. Rehnquist, Chief Justice of the United States and Paul V. Niemeyer, United States Court of Appeals for the Fourth Circuit. Professor Richards is the author of “Why Privacy Matters” (Oxford Press 2021) and “Intellectual Privacy” (Oxford Press 2015).

I. Glenn Cohen

Professor of Law at Harvard Law School

Prof. Cohen is one of the world’s leading experts on the intersection of bioethics and the law, as well as health law. He was the youngest professor on the faculty at Harvard Law School (tenured or untenured) both when he joined the faculty in 2008 (at age 29) and when he was tenured as a full professor in 2013 (at age 34), though not the youngest in history. Prior to becoming a professor, he served as a law clerk to Judge Michael Boudin of the U.S. Court of Appeals for the First Circuit and as a lawyer for U.S. Department of Justice, Civil Division, Appellate Staff. Prof. Cohen is a Fellow at the Hastings Center and of the Pierre Elliot Trudeau Foundation. He is the author of more than 200 articles and chapters and is the author, co-author, editor, or co-editor of more than 18 books. His work has been frequently covered by or appeared in PBS, NPR, ABC, NBC, CBS, CNN, MSNBC, Mother Jones, the New York Times, The Washington Post, the Boston Globe, and many other media venues. Prof. Cohen is one of three editors-in-chief of the Journal of the Law and the Biosciences and serves on the editorial board for the American Journal of Bioethics. His current projects relate to medical AI, mobile health and other health information technologies, abortion, reproduction/reproductive technology, the therapeutic use of psychedelic drugs, research ethics, organ transplantation, rationing in law and medicine, health policy, FDA law, translational medicine, medical tourism and many other topics.

Megan Doerr

Director Applied ELSI Research, Sage Bionetworks

Megan Doerr, MS, LGC leads Sage Bionetworks’ Applied ELSI Research team. Her research focuses on operationalizing and evaluating community interests in big health data research, addressing the ethical, legal, and social implications of informed consent, research participation, data governance, and data sharing. She has developed electronic informed consent processes for a variety of studies, including the US National Institutes of Health (NIH)’s *All of Us* Research Program and the NIDDK Kidney Precision Medicine Project, and served as a consultant to the several of the US National Institute of Allergy and Infectious Disease (NIAID)’s COVID-19 Prevention Network (CoVPN) vaccine trials. Ms. Doerr advocates for innovative, data-driven, participant-centric approaches to open science. Through the Global Alliance for Genomics and Health, Ms. Doerr works to promote global collaboration and best practices in research governance. Ms. Doerr is a licensed genetic counselor who previously practiced at the Cleveland Clinic.

Jordan Harrod

Harvard-MIT Health Sciences and Technology program

Jordan Harrod (she/her) is a PhD Candidate in Medical Engineering and Medical Physics at the Harvard-MIT Health Sciences and Technology program. Her research focuses on applying neuromodulation to clinically relevant challenges, and using neurotechnology and machine learning to develop new tools for brain stimulation. Jordan received her Bachelor of Science in Biomedical Engineering from Cornell University in 2018, where she worked on interfacial tissue engineering, medical image analysis, and machine learning for MRI reconstruction. In her spare time, Jordan is actively involved in science communication via her YouTube channel, which focuses on engaging the public on artificial intelligence, as well as on Twitter, Tiktok, and Instagram.

Kristin Kostick-Quenet**Assistant Professor in the Center for Medical Ethics and Health Policy, Baylor College of Medicine**

Dr. Kristin Kostick-Quenet is a bioethicist and medical anthropologist whose research focuses on ethical, social and cultural factors related to emerging bio- and neurotechnologies and the use of artificial intelligence (AI) and machine learning (ML) applications in healthcare. Her current research focuses on ethical translation of computer perception technologies, including digital phenotyping and computational affective/behavioral analysis into clinical care. Other recent publications address ethical issues related to integrating AI/ML into clinical decision making, closed-loop technologies in deep brain stimulation, and computational ethics (e.g. blockchain) approaches to consent, data governance and privacy. She has also published on topics ranging from ethical design of AI/ML user systems and interfaces, communicating AI/ML-based personalized diagnostics and risk, return of results in psychiatric genetics research, ethical issues in disorders of consciousness, and ethical/practical considerations for implementing decision aids (particularly for Left Ventricular Assist Device therapy for heart failure) and other clinical interventions into real-world clinical contexts, including global health settings.

Jasmine McNealy**University of Florida | Mozilla**

Jasmine McNealy is an attorney, critical public interest technologist, and social scientist who studies emerging media & technology with a view toward influencing law and policy. Her research emphasizes technological ecosystems, privacy, surveillance, and data governance. She is a Senior Fellow in Tech Policy with the Mozilla Foundation, associate professor at the University of Florida, and a Faculty Associate at the Berkman Klein Center for Internet & Society at Harvard University.

Michelle Meyer**Department of Bioethics and Decision Sciences, Geisinger**

Michelle N. Meyer is the Chief Bioethics Officer at Geisinger, and Associate Professor and Chair of the Department of Bioethics and Decision Sciences in Geisinger's Research Institute, a division of the College of Health Sciences. She is also Faculty Co-Director of the Behavioral Insights Team (BIT) in Geisinger's Steele Institute for Health Innovation. The BIT designs, implements, and uses large field experiments to rigorously evaluate behaviorally-informed provider- and patient-facing interventions that aim to make healthy choices easier. In addition to conducting normative ethics scholarship and empirical legal research, she uses survey experiments and qualitative methods to investigate judgments and decision-making related to science, innovation, and health. She earned a Ph.D. in religious studies, with a focus on applied ethics, from the University of Virginia and a J.D. from Harvard Law School.

Nicholson Price**Professor of Law, University of Michigan Law School**

Nicholson Price is a Professor of Law at the University of Michigan Law School. He studies how law shapes biomedical innovation, especially in the area of artificial intelligence in medicine. He has presented his work at venues in ten countries across three continents and has authored over seventy articles and books chapters, which appear in *Nature*, *Science*, *JAMA*, the *Stanford Law Review*, and elsewhere. He teaches patents, health law, innovation in the life sciences, AI and the law, and science fiction and the law. Nicholson is co-PI of the Project on Precision Medicine, Artificial Intelligence, and the Law at the Petrie-Flom Center at Harvard Law School and a Senior Fellow at the University of Copenhagen's Center for Advanced Studies in Biomedical Innovation Law. He holds a PhD in Biological Sciences and a JD, both from Columbia, and an AB from Harvard.

Daniel S. Schiff**Assistant Professor of Technology Policy, Purdue University, Department of Political Science and Co-Director, Governance and Responsible AI Lab**

Dr. Daniel Schiff is an Assistant Professor of Technology Policy at Purdue University's Department of Political Science and the Co-Director of GRAIL, the Governance and Responsible AI Lab. As a policy scientist with a background in philosophy, he studies the formal and informal governance of AI through policy and industry, as well as AI's social and ethical implications in domains like education, manufacturing, finance, and criminal justice. Daniel was the founding Responsible AI Lead at JP Morgan Chase & Co., Secretary of the IEEE 7010-2020 standard, the first AI ethics industry standard, and Director of Research, Evaluation, and Planning at the Philadelphia Education Fund. He studied Philosophy at Princeton University, focusing on robotics and intelligent systems, before completing a Master's in Social Policy at the University of Pennsylvania and PhD in Public Policy from the Georgia Institute of Technology. You can see his work in venues such as *Policy Studies Journal*, *Science and Public Policy*, *Public Administration*, *Technology in Society*, *Review of Policy Research*, *AI & Society*, the *International Journal of AI in Education*, *IEEE Transactions on Technology & Society*, the *Journal of Engineering Education*, the *AMA Journal of Medical Ethics*, and *Nanotechnology*.