Diverse Research Ethics Education
Increasingly, everyday citizens are supporting or conducting health research. We created the Building Research Integrity and Capacity (BRIC) course to educate traditional learners (undergraduates) as well as non-traditional researchers (community health workers and citizen scientists) about the scientific method and ethical principles and practices. Recently, BRIC was used to teach a “participant-led research” (PLR) group about basic research concepts, including the process of forming a research question and hypothesis to guide their self-studies. In the PLR form of citizen science, which is both unregulated and increasing, the patient is both the researcher and the research participant. We are actively studying issues of governance, safety and informed consent in citizen science.

Engaging Older Adults in Digital Health Research
The US population over 65 is rapidly increasing and technology can play an important role in facilitating “aging in place.” Residents of an independent living retirement community have enrolled in a 5-year study that uses pervasive sensor technologies to gather personal health data with a goal learning, through artificial intelligence, how to help people live independently longer. Our team used a human-centered design process to identify their technology needs along with barriers and facilitators to adoption. Technology and data literacy along with privacy concerns and access are clear barriers. What motivates older adults is a desire to learn from their data and contribute to designing health technologies they can use. The gap? While we recognize a need to increase tech literacy in older adults, it is equally important to increase aging literacy among technology makers.

Informing Research Ethics in the Digital Age
The digital revolution is disrupting the ways in which health research is conducted and by whom. The rise of digital health technologies has resulted in vast quantities of both qualitative and quantitative “big data” that hold valuable information about user interactions and transactions which could be beneficial but, also potentially harmful. Those in the digital health research sector lack consistent standards across regulations, training and ethical norms. No doubt, important societal conversations are needed to shape how these sociotechnical systems influence our lives as individuals, as well as the impact on our society at large.