



Shen Lab

Law, Ethics, Neuroscience,
& Artificial Intelligence
www.fxshen.com

What We Do: From Lab to Law

Every story is a brain story, and every day these stories become richer as scientists across the world make advances in how we understand and treat the human brain. The potential implications are stunning. Brain science might allow us to one day reverse dementia, prevent addiction, reduce interpersonal violence, detect lies, and much more. But whether this promise is realized depends on the path that is forged **from lab to law**.



The world is our lab: Dr. Shen conducting a study on legal decision-making at the Minnesota State Fair.

“Every day we learn more about how our brains work. Our mission is to translate those advances into better law and policy, and to address the ethical, legal, and social implications posed by advances in neurotechnology.”

— Lab Director Francis Shen

That’s where we come in. The mission of the Shen Lab is to translate advances in brain science and artificial intelligence into better law and policy, and to identify and address the ethical, legal, and social implications of advances in neurotechnology and AI. We recognize that the promise of brain science must be balanced against the perils of premature and inappropriate uses.

Using a variety of empirical, legal, community-engaged and bioethics

methods, we pursue two types of research. We conduct research to better enable lawyers, courts, and policymakers to understand what, precisely, neuroscience can (and cannot) offer. But recognizing that current neuroscience tools and knowledge are insufficient for pressing legal problems, we also focus heavily on the ethical, legal, and social implications of new neurotechnologies such as digital phenotyping and portable neuroimaging.

We study big problems at the cutting edge of law, ethics, neuroscience, and AI, including: the regulation of portable neurotechnology and neuromodulation; behavioral genetics and the law; research ethics for digital / computational phenotyping in psychiatry; aging brains and the law; criminal responsibility and sentencing; sports concussions; litigating brain injury and pain; brain-based lie detection; legal implications of the developing and young adult brain; and improving diversity, equity, inclusion in neuroscience research and clinical practice.

Contact: Dr. Shen’s Lab is based at the Harvard Medical School Center for Bioethics and the MGH Dept. of Psychiatry, and affiliated with Harvard Law School. **To learn more**, including inquiries about potential openings in the Lab, contact Dr. Shen at fshen@law.harvard.edu.