Alondra Nelson

Sociotechnical Turns in *The Social Life of DNA*: From the Human Genome Project to AI

In this keynote lecture, Professor Alondra Nelson will describe the evolution of four paradigms in genetics research—the Human Genome Project, genome-wide association studies, polygenic risk scores, and artificial intelligence—to trace how claims about the relationship between DNA and ancestry have changed over time. She will argue that developments in technology, on the one hand, and dynamic understandings of race, ethnicity, and ancestry, on the other, together coproduced sociotechnical turns that have both reinforced and undermined the geneticization of human difference.

BIO

Alondra Nelson is the Harold F. Linder Professor at the Institute for Advanced Study, where she leads the Science, Technology, and Social Values Lab. Widely known for her scholarship at the intersection of science, technology, and society, Nelson's research takes an innovative approach to the social sciences in generative dialogue with other fields. She connects these dimensions in a range of publications including *Genetics and the Unsettled Past* and *The Social Life of DNA*, as well as articles in *Science*, *PLOS: Computational Biology*, *PLOS: Medicine, Genetics in Medicine*, and the *American Journal of Public Health.* Her essays, reviews, and commentary have been featured in *The New York Times*, *The Washington Post*, *The Wall Street Journal*, *Foreign Affairs*, *Wired* and *Science*. She was previously president and CEO of the Social Science Research Council and served on the faculty of Yale University and Columbia University.

Nelson was deputy assistant to and acting director of the White House Office of Science and Technology Policy, where she led the development of the “Blueprint for an AI Bill of Rights,” a cornerstone of President Biden’s recent artificial intelligence executive order. In recognition of her OSTP tenure, *Nature* named Nelson to its global list of Ten People Who Shaped Science. In 2023, she was included on the *TIME*100 inaugural list of the most influential people in AI, and was appointed by United Nations Secretary-General António Guterres to serve on the High-level Advisory Body on AI.

She is an elected member of the American Academy of Arts and Science, the American Association for the Advancement of Science, the American Philosophical Society, the Council on Foreign Relations, and the U.S. National Academy of Medicine.