Stanford



Nicole Martinez-Martin

Assistant Professor (Research) of Pediatrics (Biomedical Ethics) and, by courtesy, of Psychiatry and Behavioral Sciences (Child and Adolescent Psychiatry and Child Development)

Pediatrics - Center for Biomedical Ethics

Bio

BIO

Nicole Martinez-Martin received her JD from Harvard Law School and her doctorate in social sciences (comparative development/medical anthropology) from the University of Chicago. Her broader research interests concern the impact of new technologies on the treatment of vulnerable populations. Her graduate research included the study of cross-cultural approaches to mental health services in the Latine community and the use neuroscience in criminal cases. Her recent work in bioethics and neuroethics has focused on the ethics of AI and digital health technology, such as digital phenotyping or computer vision, for medical and behavioral applications.

She has served as PI for research projects examining ethical issues regarding machine learning in health care, digital health technology, digital contact tracing, and digital phenotyping. She has examined policy and regulatory issues related to privacy and data governance, bias and oversight of machine learning and digital health technology. Her K01 career development grant, funded through NIMH, focuses on the ethics of machine learning and digital mental health technology. Recent research has included examining bias, equity and inclusion as it pertains to machine learning and digital health, as well as social implications of privacy and data protections on marginalized groups.

ACADEMIC APPOINTMENTS

- Assistant Professor-Research, Pediatrics - Center for Biomedical Ethics
- Assistant Professor-Research (By courtesy), Psychiatry and Behavioral Sciences - Child & Adolescent Psychiatry and Child Development
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Wu Tsai Neurosciences Institute

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Board Member, International Neuroethics Society (2023 - present)
- Diversity & Inclusion Task Force, International Neuroethics Society (2020 - 2022)
- Neuroethics Framework - Legal System Working Group, Co-Chair, IEEE (2020 - present)
- Ethics Committee, International Society for Psychiatric Genetics (2019 - present)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

NIH/National Institute of Mental Health

K01 MH118375-01A1

“Ethical, Legal and Social Implications in the Use of Digital Technology for Mental Health Applications”

Greenwall Foundation Making a Difference in Bioethics Grant

“Ethical, Legal and Social Implications of Digital Phenotyping”

Teaching

COURSES

2026-27

- Introduction to Science, Technology & Society: STS 1 (Win)
- Just Biotech: Who Benefits and Who Is Left Behind in Global Biotechnologies: COLLEGE 117 (Spr)
- The Ethics of Developing Life-Saving Technologies for Children: STS 115 (Win)

2025-26

- Introduction to Science, Technology & Society: STS 1 (Win)
- Just Biotech: Who Benefits and Who Is Left Behind in Global Biotechnologies: COLLEGE 117 (Spr)
- The Ethics of Developing Life-Saving Technologies for Children: STS 115 (Win)

2024-25

- Introduction to Science, Technology & Society: STS 1 (Win)
- Justice in Biotechnologies: Who Benefits and Who Is Left Behind: COLLEGE 117 (Spr)
- The Ethics of Developing Life-Saving Technologies for Children: STS 115 (Win)

2023-24

- Introduction to Science, Technology & Society: STS 1 (Win)
- Where Does it Hurt?: Medicine and Suffering in Global Context: COLLEGE 108 (Spr)

STANFORD ADVISEES

Postdoctoral Research Mentor

Madelena Ng

Publications

PUBLICATIONS

- **Rationales and Approaches to Protecting Brain Data: a Scoping Review** *NEUROETHICS*
  Jwa, A. S., Martinez-Martin, N.
  2024; 17 (1)
- **Re-thinking the Ethics of International Bioethics Conferencing.** *The American journal of bioethics : AJOB*
  Brown, T. E., Martinez-Martin, N., Cabrera, L. Y.
  2024; 24 (4): 55-57
- **Peer review of GPT-4 technical report and systems card.** *PLOS digital health*
  Gallifant, J., Fiske, A., Levites Strekalova, Y. A., Osorio-Valencia, J. S., Parke, R., Mwavu, R., Martinez, N., Gichoya, J. W., Ghassemi, M., Demner-Fushman, D., McCoy, L. G., Celi, L. A., Pierce, et al
  2024; 3 (1): e0000417
- **Delivering on NIH data sharing requirements: avoiding Open Data in Appearance Only.** *BMJ health & care informatics*
  Watson, H., Gallifant, J., Lai, Y., Radunsky, A. P., Villanueva, C., Martinez, N., Gichoya, J., Huynh, U. K., Celi, L. A.
  2023; 30 (1)

- **Returning Individual Research Results from Digital Phenotyping in Psychiatry.** *The American journal of bioethics : AJOB*
  Shen, F. X., Baum, M. L., Martinez-Martin, N., Miner, A. S., Abraham, M., Brownstein, C. A., Cortez, N., Evans, B. J., Germine, L. T., Glahn, D. C., Grady, C., Holm, I. A., Hurley, et al
  2023: 1-22

- **Viewing CAI as a Tool Within the Mental Health Care System** *AMERICAN JOURNAL OF BIOETHICS*
  Martinez-Martin, N.
  2023; 23 (5): 57-59

- **Passive monitoring by smart toilets for precision health.** *Science translational medicine*
  Ge, T. J., Rahimzadeh, V. N., Mintz, K., Park, W. G., Martinez-Martin, N., Liao, J. C., Park, S. M.
  2023; 15 (681): eabk3489

- **Epistemic Rights and Responsibilities of Digital Simulacra for Biomedicine.** *The American journal of bioethics : AJOB*
  Cho, M. K., Martinez-Martin, N.
  2022: 1-12

- **Envisioning a Path toward Equitable and Effective Digital Mental Health.** *AJOB neuroscience*
  Martinez-Martin, N.
  2022; 13 (3): 196-198

- **Bridging the AI Chasm: Can EBM Address Representation and Fairness in Clinical Machine Learning?** *The American journal of bioethics : AJOB*
  Martinez-Martin, N., Cho, M. K.
  2022; 22 (5): 30-32

- **Ethical Development of Digital Phenotyping Tools for Mental Health Applications: Delphi Study.** *JMIR mHealth and uHealth*
  Martinez-Martin, N., Greely, H. T., Cho, M. K.
  2021; 9 (7): e27343

- **Dimensions of Research-Participant Interaction: Engagement is Not a Replacement for Consent.** *The Journal of law, medicine & ethics : a journal of the American Society of Law, Medicine & Ethics*
  Shearer, E., Martinez, N., Magnus, D.
  2020; 48 (1): 183–84

- **What Are Important Ethical Implications of Using Facial Recognition Technology in Health Care?** *AMA journal of ethics*
  Martinez-Martin, N.
  2019; 21 (2): E180–187

- **Data mining for health: staking out the ethical territory of digital phenotyping** *NPJ DIGITAL MEDICINE*
  Martinez-Martin, N., Insel, T. R., Dagum, P., Greely, H. T., Cho, M. K.
  2018; 1

- **Is It Ethical to Use Prognostic Estimates from Machine Learning to Treat Psychosis?** *AMA journal of ethics*
  Martinez-Martin, N., Dunn, L. B., Roberts, L. W.
  2018; 20 (9): E804–811

- **Surveillance and Digital Health.** *The American journal of bioethics : AJOB*
  Martinez-Martin, N., Char, D.
  2018; 18 (9): 67–68

- **Ethical Issues for Direct-to-Consumer Digital Psychotherapy Apps: Addressing Accountability, Data Protection, and Consent** *JMIR MENTAL HEALTH*
  Martinez-Martin, N., Kreitmair, K.
  2018; 5 (2): e32