



Madelena Ng

Postdoctoral Scholar, Biomedical Ethics

Bio

BIO

Dr. Madelena Ng is a Postdoctoral Fellow in the Stanford Training Program in ELSI Research (T32) at the Center for Biomedical Ethics. Dr. Ng is an applied health scientist who evaluates the real-world impact of emerging technologies on clinical, behavioral, and societal outcomes. Prior to her appointment at SCBE, Dr. Ng was a Postdoctoral Scholar the Stanford Center for Biomedical Informatics Research leading foundational work in AI ethics, governance, and responsible innovation. She aims to further her training in ELSI research at the intersection of generative biological AI, human rights, and industry practice. She is committed to driving ethics from the margins to the core of health AI development and decision-making.

PROFESSIONAL EDUCATION

- DrPH, University of California, Berkeley , Public Health with DE in Science and Technology Studies
- MPH, University of California, Los Angeles , Epidemiology
- BS, University of California, Los Angeles , Neuroscience with minor in Asian American Studies

STANFORD ADVISORS

- Nicole Martinez, Postdoctoral Research Mentor
- Mildred Cho, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Tina Hernandez-Boussard, Boussard Lab (10/1/2021)

Publications

PUBLICATIONS

- **Global Initiative on AI for Health (GI-AI4H): strategic priorities advancing governance across the United Nations.** *NPJ digital medicine*
Muralidharan, V., Ng, M. Y., AlSalamah, S., Pujari, S., Kalra, K., Singh, R., Schalet, D., Olantuji, T., Malpani, R., Matin, R. N., Omiye, J. A., Zhao, Y., Sands, et al
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- **Development of secure infrastructure for advancing generative artificial intelligence research in healthcare at an academic medical center.** *Journal of the American Medical Informatics Association : JAMIA*
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- **Scaling equitable artificial intelligence in healthcare with machine learning operations.** *BMJ health & care informatics*

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- **Perceptions of Data Set Experts on Important Characteristics of Health Data Sets Ready for Machine Learning: A Qualitative Study.** *JAMA network open*
Ng, M. Y., Youssef, A., Miner, A. S., Sarellano, D., Long, J., Larson, D. B., Hernandez-Boussard, T., Langlotz, C. P.
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- **The AI life cycle: a holistic approach to creating ethical AI for health decisions.** *Nature medicine*
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- **Participant Evaluation of Blockchain-Enhanced Women's Health Research Apps: Mixed Methods Experimental Study.** *JMIR mHealth and uHealth*
Ng, M. Y., Halpern, J., Shane, O., Teng, T., Nguyễn, M., Alt, C. R., Leite, A. B., Moss-Pultz, S., Lyles, C. R., Cheshire, C.
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- **Sequence modeling and design from molecular to genome scale with Evo.** *Science (New York, N.Y.)*
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- **Development of Secure Infrastructure for Advancing Generative AI Research in Healthcare at an Academic Medical Center.** *Research square*
Ng, M. Y., Helzer, J., Pfeffer, M. A., Seto, T., Hernandez-Boussard, T.
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- **AI and biosecurity: The need for governance.** *Science (New York, N.Y.)*
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2024; 385 (6711): 831-833
- **Email-Based Recruitment Into the Health eHeart Study: Cohort Analysis of Invited Eligible Patients.** *Journal of medical Internet research*
Ng, M. Y., Olgin, J. E., Marcus, G. M., Lyles, C. R., Pletcher, M. J.
2023; 25: e51238
- **Organizational Factors in Clinical Data Sharing for Artificial Intelligence in Health Care.** *JAMA network open*
Youssef, A., Ng, M. Y., Long, J., Hernandez-Boussard, T., Shah, N., Miner, A., Larson, D., Langlotz, C. P.
2023; 6 (12): e2348422
- **Usability, inclusivity, and content evaluation of COVID-19 contact tracing apps in the United States** *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*
Blacklow, S. O., Lisker, S., Ng, M. Y., Sarkar, U., Lyles, C.
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- **Smartphone-Based Geofencing to Ascertain Hospitalizations** *CIRCULATION-CARDIOVASCULAR QUALITY AND OUTCOMES*
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- **Continuous daily assessment of multiple sclerosis disability using remote step count monitoring** *JOURNAL OF NEUROLOGY*
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- **IRF8 acts in lineage-committed rather than oligopotent progenitors to control neutrophil vs monocyte production** *BLOOD*
Yanez, A., Ng, M. Y., Hassanzadeh-Kiabi, N., Goodridge, H. S.
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- **Detection of a TLR2 agonist by hematopoietic stem and progenitor cells impacts the function of the macrophages they produce** *EUROPEAN JOURNAL OF IMMUNOLOGY*
Yanez, A., Hassanzadeh-Kiabi, N., Ng, M. Y., Megias, J., Subramanian, A., Liu, G. Y., Underhill, D. M., Luisa Gil, M., Goodridge, H. S.

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● **Preferential Biological Processes in the Human Limbus by Differential Gene Profiling** *PLOS ONE*

Nakatsu, M. N., Vartanyan, L., Vu, D. M., Ng, M. Y., Li, X., Deng, S. X.

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● **Wnt/beta-Catenin Signaling Regulates Proliferation of Human Cornea Epithelial Stem/Progenitor Cells** *INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE*

Nakatsu, M. N., Ding, Z., Ng, M. Y., Truong, T. T., Yu, F., Deng, S. X.

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