

Stanford



Madelena Ng

Postdoctoral Scholar, Biomedical Informatics

Bio

BIO

Dr. Ng is a postdoctoral fellow at the Stanford Center for Biomedical Informatics Research, mentored by Dr. Tina Hernandez Boussard. Her research aims to illuminate the evolving ethical and practical challenges with emerging technologies used for health purposes. Prior to joining Stanford, Dr. Ng facilitated mobile- and internet-based health research initiatives with the Health eHeart Study and the Eureka Digital Research Platform and developed research study prototypes that used blockchain technology for health data exchange. Her current work focuses on discerning key challenges that exist at each stage of the AI life cycle and generating informed guidance to drive the responsible and equitable use of AI for patient care.

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

- Tina Hernandez-Boussard, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **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.
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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*
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- **Organizational Factors in Clinical Data Sharing for Artificial Intelligence in Health Care.** *JAMA network open*
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- **The AI life cycle: a holistic approach to creating ethical AI for health decisions.** *Nature medicine*
Ng, M. Y., Kapur, S., Blizinsky, K. D., Hernandez-Boussard, T.
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- **Usability, inclusivity, and content evaluation of COVID-19 contact tracing apps in the United States** *JOURNAL OF THE AMERICAN MEDICAL INFORMATICS 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*
Nguyen, K. T., Olgin, J. E., Pletcher, M. J., Ng, M., Kaye, L., Moturu, S., Gladstone, R. A., Malladi, C., Fann, A. H., Maguire, C., Bettencourt, L., Christensen, M. A., Marcus, et al
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- **Continuous daily assessment of multiple sclerosis disability using remote step count monitoring** *JOURNAL OF NEUROLOGY*
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2017; 264 (2): 316-326
- **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.
2013; 43 (8): 2114-2125
- **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.
2013; 8 (4): e61833
- **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.
2011; 52 (7): 4734-4741