Stanford

Stephen Ma

- Affiliate, Department Funds
- Fellow in Graduate Medical Education

Bio

BIO

Stephen Ma is a Clinical Informatics Fellow at Stanford University School of Medicine. His fellowship work has focused on the development, implementation, and evaluation of novel technologies to optimize clinical workflows. Areas of focus include 1) the use of generative AI/large language models for a variety of workflows such as patient messages, patient instructions, translation, and ambient clinical documentation, 2) machine learning algorithms for antimicrobial stewardship and laboratory utilization, 3) secure inpatient messages and on-call scheduling, and 4) development of novel user interfaces for chart review.

His undergraduate degree was in Electrical Engineering at Princeton University, after which he pursued his MD/PhD at Columbia University. He did his doctoral work in the laboratory of Professor Gordana Vunjak-Novakovic where he developed human cardiac models of disease incorporating patient-derived stem cells, optogenetics, tissue engineering, optoelectronics, and video processing. He subsequently completed his residency in Internal Medicine at Stanford University prior to joining the Clinical Informatics Fellowship.

CLINICAL FOCUS

- Fellow
- Clinical Informatics
- Internal Medicine
- Machine Learning
- Digital Health

HONORS AND AWARDS

- Robert G. Bertsch Prize in Surgery, Columbia University Vagelos College of Physicians and Surgeons (2019)
- Izard Prize in Cardiology, Columbia University Vagelos College of Physicians and Surgeons (2019)
- Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (F30), NIH (2016)
- Sigma Xi Book Award for Undergraduate Research, Princeton University (2011)

PROFESSIONAL EDUCATION

- Residency, Stanford University , Internal Medicine (2022)
- MD, Columbia University Vagelos College of Physicians and Surgeons (2019)
- PhD, Columbia University , Biomedical Engineering (2018)
- BSE, Princeton University , Electrical Engineering (2011)

PATENTS

- "United States Patent 11299714 ENGINEERED ADULT-LIKE HUMAN HEART TISSUE", Apr 12, 2022

- "United States Patent 1126143 BIOREACTOR SYSTEM FOR ENGINEERING TISSUES", Mar 1, 2022

- "United States Patent Application 17118766 SYSTEM AND METHODS FOR OPTOGENETIC EVALUATION OF HUMAN NEUROMUSCULAR FUNCTION", Jun 17, 2021