

# Annabel Xulin Tan

PHD STUDENT IN EPIDEMIOLOGY AT STANFORD · BIostatistics, EPIDEMIOLOGY, CAUSAL INFERENCE

☎ (+1) 203-892-9783 | ✉ annabelxtan@gmail.com | 🏠 www.annabelxtan.com | 📧 annabelxtan | 🌐 annabelxtan

## Education

---

### Stanford University

PHD IN EPIDEMIOLOGY AND CLINICAL RESEARCH

*Palo Alto, California*

*Sept 2020 - present*

- Near-peer mentor for Advancing Health Equity and Diversity (AHEaD) scholars for Summer 2021 - 2022.

### Yale School of Public Health

MASTER OF PUBLIC HEALTH (MPH)

*New Haven, CT*

*Aug 2013 - May 2015*

- Global Health Field Leadership Award (\$5000 award)
- Teaching Assistant in 2 classes of over 30 students: Introduction to Bioengineering, Global Health

### Imperial College London

MASTER OF ENGINEERING (M.ENG) IN BIOMEDICAL ENGINEERING

*London, United Kingdom*

*Oct 2006 - Oct 2010*

- **Upper Second Class Honors.** Top 10% of graduating class.
- Visiting Scholar at University of California, San Diego from Aug 2009 - Jun 2010. GPA 3.76/4.0

## Work Experience

---

### Stanford University

GRADUATE RESEARCH ASSISTANT

*Palo Alto, CA*

*Sep 2020 - present*

- Dissertation project: Characterizing Environmental Determinants of Cardiovascular Health Using Diverse Data Streams, using Dept of Health Care Access and Information (California), National Weather Service (NWS) datasets with >2 million observations.
- Developed an iPhone app (Cardinal Lifespace) to characterize a novel measure of how we live called lifespace, deployed among 200 participants. App is available in the iOS App Store.

EPIDEMIOLOGY RESEARCH ASSOCIATE

*Dec 2018 - Sep 2020*

- Led projects in Covid-19 and cardiovascular health using large datasets resulting in first authorship of two papers in JAMA Network Open and Circulation respectively (citations below). (citations below)
- Established a working data infrastructure for the Odden lab
- Facilitated strategic collaborations between the Odden Lab and partner academic institutions that resulted in three NIH-supported R01 grants worth over \$2 million USD

### Yale Global Health Leadership Institute

PROGRAM MANAGER

*New Haven, CT*

*Jun 2015 - Jun 2018*

- Oversaw 3 executive leadership education program efforts between Yale and partners in the National Health Service (UK), and Ministries of Health (China, Ethiopia); achieved “exceeded expectations” in end of program survey 100% every time
- Managed complex deliverables including a time sensitive program impact evaluation to measure efficacy of district level health management across 226 health centers in Ethiopia.
- Led data collection of large qualitative dataset (150 interviews) and statistical analyses and for 2 longitudinal health outcomes research projects using R and SAS, resulting in 3 highly cited papers in top tier journals

### Duke-NUS Medical School

RESEARCH ASSISTANT

*Singapore*

*Jan 2011 - Jun 2013*

- Assisted in managing neuroscience lab operations, ran independent experiments and supported data analysis, leading to 1 peer reviewed publication in journal.

## Honors & Awards

---

2014	<b>Yale Global Health Field Award</b> , Yale University	New Haven, CT
2010	<b>Provost Honors</b> , University of California, San Diego	San Diego, CA
2010	<b>Associate</b> , City and Guilds of London Institute	London, UK

## Skills

---

<b>Programming</b>	<b>Fluent:</b> R, Stata, Python, SQL, Matlab <b>Intermediate:</b> SAS, HTML
<b>Machine Learning Tools</b>	OpenCV, TensorFlow, PyTorch, Pandas, Scikit Learn
<b>General Tools</b>	Git, $\LaTeX$
<b>Spoken Languages</b>	<b>Fluent:</b> English. <b>Intermediate:</b> Malay, Chinese

## Data Science Class Projects

---

### CS 229 Machine Learning

Palo Alto, CA

AUTHOR

Fall 2022

- Project title: Sample Size and Heterogeneity Trade offs in Cohort Selection
- Developed an algorithm to train multiple classification models to identify patients with breast cancer and compare predictive performance between logistic regression, support vector machine and random forest.

## Selected Publications

---

- Chang, A., **Tan, AX**, K. Nadeau, and M. Odden (2022). "Aging Hearts in a Hotter, More Turbulent World: The Impacts of Climate Change on the Cardiovascular Health of Older Adults." In: *Current Cardiology Reports*.
- Tan, A.X.**, J. A. Hinman, H. S. Abdel Magid, L. M. Nelson, and M. C. Odden (May 2021). "Association Between Income Inequality and County-Level COVID-19 Cases and Deaths in the US". In: *JAMA Network Open* 4.5, e218799–e218799. DOI: 10.1001/jamanetworkopen.2021.8799.
- Tan, A.X.**, S. J. Shah, J. L. Sanders, B. M. Psaty, C. Wu, J. M. Gardin, C. A. Peralta, A. B. Newman, and M. C. Odden (2021). "Association Between Myocardial Strain and Frailty in CHS". In: *Circulation: Cardiovascular Imaging* 14.5, e012116.
- Taylor, L. A., **Tan, A.X.**, C. E. Coyle, C. Ndumele, E. Rogan, M. Canavan, L. A. Curry, and E. H. Bradley (Aug. 2016). "Leveraging the Social Determinants of Health: What Works?" In: *PLOS ONE* 11.8, pp. 1–20. DOI: 10.1371/journal.pone.0160217.
- Tan, A.X.**, S. Kapiga, K. Khoshnood, and R. D. Bruce (Dec. 2015). "Epidemiology of Drug Use and HIV-Related Risk Behaviors among People Who Inject Drugs in Mwanza, Tanzania". In: *PLOS ONE* 10.12, pp. 1–15. DOI: 10.1371/journal.pone.0145578.