CINDY J. PANG

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RESEARCH INTERESTS

Methodology: Bayesian Analysis, Machine Learning, Survival Analysis

Applications: Cancer Epigenetics, Infectious Disease Epidemiology, Big Data Analysis

EDUCATION

University of California, Los Angeles

(Expected 2028)

Los Angeles, CA Ph.D. Biostatistics

University of North Carolina at Chapel Hill

2019-2023

Chapel Hill, NC

B.S.P.H Biostatistics; B.A. Mathematics; Minor: English

RESEARCH EXPERIENCE

UCLA Department of Environmental Health Sciences Graduate Student Researcher

01/2025-Present Los Angeles, CA

- · Designed and implemented deep learning models (DeepSurv, DeepHit) and Random Survival Forests to predict and identify key biomarkers for ovarian cancer relapse using high-dimensional CpG methylation data from TCGA, achieving improved prognostic performance measured by C-index and Integrated Brier Score.
- · Using PyTorch, PyCox, and scikit-survival to build and evaluate survival models; First-author manuscript is currently in preparation detailing methodological contributions and findings.

UCLA Department of Biostatistics Graduate Student Researcher

09/2023- Present Los Angeles, CA

Advisor: Dr. Sudipto Banerjee

· Developed method that reduced computation time for analyzing longitudinal wearable device data from hours to seconds using a Bayesian hierarchical model

Carolina Population Center Undergraduate Research Assistant

09/2021 - 05/2023 Chapel Hill, NC

Advisor: Dr. Paul Delamater, Department of Geography

- · Created high (geographic) resolution estimates of vaccination coverage over time and conducted scientific literature searches, created maps and graphics, and produced narrative text describing data and methods as first-author in a peer-reviewed publication
- · Improved understanding discrepancies in case reporting during COVID-19 pandemic by implementing a Bayesian hierarchical model to estimate missing COVID-19 cases over time for all North Carolina counties using cluster-computing capabilities

TEACHING EXPERIENCE

Spring 2025	Teaching Assistant, BIOSTAT 200C: Methods in Biostatistics C, UCLA Department
	of Biostatistics.
	Floater Teaching Assistant*, BIOSTAT M231: Power and Sample Size and BIO-
	STAT 285: Deep Learning - Statistical Perspectives.
Winter 2025	Floater Teaching Assistant*, BIOSTAT M234: Applied Bayesian Analysis, BIOSTAT
	218: Observational Data Science, and BIOSTAT 285: Healthcare, Economics, and LLM.
Fall 2024	Teaching Assistant, BIOSTAT 120: Biostatistics in Public Health, UCLA Department
	of Biostatistics.
Fall 2023,	Teaching Assistant, BIOSTAT 100A: Introduction to Biostatistics, UCLA Department
Spring 2024,	of Biostatistics. Average Overall Rating: 8.82/9. Lab Course Website.
Summer 2024	

^{*} Floater Teaching Assistant role – provides tutoring support for full-time working students in the Masters of Data Science and Health Program (UCLA MDSH)

HONORS & AWARDS

202	24	Graduate Research Mentorship (GRM) Award, UCLA Graduate Division
202	23	Three Year Service Award, Carolina Housing
202	22	William W. and Ida W. Taylor Summer Undergraduate Research Fellowship (SURF) Award,
		University of North Carolina
202	22	Summer Institute for Statistics and Modeling in Infectious Diseases (SISMID) Scholarship, Uni-
		versity of Washington Department of Biostatistics

2022 Phi Beta Kappa, University of North Carolina

2021 Honors Carolina, University of North Carolina

PUBLICATIONS

 Cindy Pang, Paul L. Delamater, Spatiotemporal Characteristics of the SARS-CoV-2 Delta Wave in North Carolina, Spatial and Spatio-temporal Epidemiology (2023), doi: https://doi.org/10. 1016/j.sste.2023.100566

POSTERS AND PRESENTATIONS

06/2024	Bayesian Inference of Greenspace on Metabolic Equivalence of Task from Observational
	Actigraphy Experiments. Western North American Region (WNAR), International Bio-
	metric Society, Fort Collins, CO. Contributed Talk.
04/2023	Estimating COVID-19 Incidence During the Pre-Vaccination Era in North Carolina Coun-
	ties by Leveraging Spatial Characteristics. Poster. UNC Celebration of Undergraduate
	Research, Chapel Hill, NC
12/2021	The Nonlinear Dynamics of Infectious Disease Models (SIR). Directed Reading Program
	(DRP), UNC Department of Mathematics.
07/2021	Estimating Localized COVID-19 Immunity Levels for North Carolina Counties. Summer
	Undergraduate Pipeline (SUP) Research Symposium (virtual), UNC-Chapel Hill

SERVICE AND LEADERSHIP

$\begin{array}{c} {\bf UCLA~Biostatistics~Student~Association} \\ {\bf \it President} \end{array}$

01/2025 - Present Los Angeles, CA

- · Lead the planning and execution of 1–2 events per academic quarter to foster community, inclusion, and engagement among UCLA Biostatistics students, faculty, and staff.
- · Foster open communication between students and faculty by relaying student feedback and working with departmental leadership to address academic and community concerns.

Carolina Housing
Residential Advisor

07/2020 - 05/2023Chapel Hill, NC

- · Oversaw up to 30 student residents per semester; provide mentoring and serve as a mandated reporter
- · Planned and organized 8 community programs per semester to create an inclusive housing environment

MENTORSHIP

Bruins Public Health

02/2025 - 05/2025

· Mentored five undergraduate students with spatial data analysis in R; all mentees presented posters and gave oral presentations at the 2025 UCLA Undergraduate Research Week.

TECHNICAL SKILLS

Programming Languages Online data platforms Software R, Python, SAS, MATLAB, Java, STATA

Qualtrics
Github, LATEX