

Yutong Wang

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Graduate Group in Biostatistics
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Education	University of California, Berkeley Ph.D. in Biostatistics, 2018 - present Advisor: Yun S. Song Designated emphasis (doctoral minor) in Computational and Genomic Biology Tianjin University, China B.S. in Mathematics and Applied Mathematics, 2018
Research Interests	statistical machine learning, high dimensional statistics, probabilistic modeling, high-throughput sequencing, spatial transcriptomics, cancer biology
Publications	Youjin Lee ^{*†} , Derek Bogdanoff [*] , Yutong Wang[*] , George Hartoularos, Jonathan M. Woo, Cody T. Mowery, Hunter M. Nisonoff, David S. Lee, Yang Sun, James Lee, Sadaf Mehdizadeh, Joshua Cantlon, Eric Shifrut, David N. Ngyuen, Theodore L. Roth, Yun S. Song, Alexander Marson [†] , Eric D. Chow [†] , Chun Jimmie Ye [†] , XYZeq: Spatially-resolved single-cell RNA-sequencing reveals expression heterogeneity in the tumor microenvironment. <i>Science Advances</i> 7 , eabg4755 (2021). * indicates equal contribution, [†] indicates co-corresponding authors
Professional Experience	University of California, Berkeley 2019 - present <i>Graduate Student Researcher</i> Advisor: Yun S. Song Develop and implement novel statistical methods and computational algorithms for the joint analysis of single-cell genomics data and other data modalities including spatial transcriptome and imaging data. University of Pennsylvania 2017 <i>Undergraduate Research Assistant</i> Advisor: Nancy Zhang Designed and implemented computational experiments to compare gene expression recovery methods for single cell RNA sequencing data.
Awards and Fellowships	Biostatistics Diversity Fellowship Graduate Group in Biostatistics, UC Berkeley 2020 - 2022 Biostatistics Block Grant and Non-Resident Student Tuition Award Graduate Group in Biostatistics, UC Berkeley 2018 - 2021

	Berkeley Wellness Letter Fellowship School of Public Health, UC Berkeley	2020 - 2021
	Public Health Alumni Association Award School of Public Health, UC Berkeley	2019
Talks	Joint integration analysis of paired single-cell imaging and RNA sequencing of mature adipocytes Stanford-Berkeley Women in CS/EE Research Meetup, Stanford Women in Data Science, UC Berkeley	2022 2022
	Single-cell and spatial transcriptomics data analysis with Seurat in R Computational Biology Skills Seminar, Center for Computational Biology, UC Berkeley	2021
	XYZeq: Spatially-resolved single-cell RNA-sequencing reveals expression heterogeneity in tumor microenvironment Computational and Genomic Biology Retreat, Center for Computational Biology, UC Berkeley	2021
Teaching	Center for Computational Biology , University of California, Berkeley <i>Instructor, Python Bootcamp</i> 8-hour lectures to 122 participants including graduate students, postdoc and faculties about data structures, text manipulation, and file input/output.	Spring 2022
	<i>Graduate Student Instructor, Algorithms for Single-Cell Genomics</i> Doctoral level course on algorithms and statistical methods in single-cell genomics. Three main themes of the course are spatial transcriptomics, multi-omics integration, and immune receptor-antigen interactions.	Fall 2021
	School of Public Health , University of California, Berkeley <i>Invited Lecturer, Biostatistics Thesis Seminar (PBHLTH 292)</i> Curriculum development and 6-hour lectures to graduate students on Eugenics in Statistics, Ethnicity and Algorithmic Fairness in Health Care	Spring 2022
	Department of Statistics , University of California, Berkeley <i>Graduate Student Instructor, Concepts of Statistics (STAT 135)</i> Core upper-division course on statistical theory including parametric estimation, hypothesis testing, statistical tests, and linear regression.	Spring 2020
	<i>Graduate Student Instructor, Introduction to Statistics (STAT 2)</i> Responsible for two sections with 50 students, office hours, and grading.	2018 - 2019
Outreach	University of California, Berkeley Diversity, Equity, Inclusion & Belonging (DEIB) Fellow to plan, implement and organize concrete actions to increase diversity in Biostatistics.	2020 - present
Skills and Languages	R, Python, Matlab, Git, Bash, L ^A T _E X, Mathematica Mandarin (native), English (proficient), German (intermediate)	