Jasper Yang

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Research interests Biostatistics, survey sampling, electronic health records, environmental health,

ecology of infectious disease

Education Grinnell College Grinnell, Iowa

BA in Biology, Statistics concentration Exp. Graduation December 2021

GPA: 3.95

Research experience Perelman School of Medicine at the University of Pennsylvania,

Department of Biostatistics, Epidemiology, and Informatics

Research Assistant, Full-time, Mentor: Pamela Shaw Sep. 2020 – Present

- Conducted statistical analysis of data collected from electronic health records (EHR) to investigate risk factors associated with the competing risks of death and discharge among patients hospitalized with COVID-19. Methods included Cox proportional hazards regression and multivariable Poisson regression.
- Developed the R package 'optimall' for efficient multi-wave sampling in R. Collaborated with a research group funded by PCORI grant HSRP20181639, which studied measurement error in the collection of electronic health records.
- Assisted statistical team of RCT for convalecent plasma COVID-19 treatment.

Grinnell College Biology Department

Research Assistant, Mentor: Vida Praitis

May 2020 – August 2020

- Led statistical analysis of scRNA-seq data in *C. elegans embryogenesis* using R with Bioconductor.
- Presented findings in complete research paper.

Boston University School of Public Health, Summer Institute in Biostatistics

Jacqueline Milton

- Conducted and presented a collaborative research project using PLINK software to analyze the GAW data set.
- Analyzed data collected from the Framingham Heart Study and Jackson Heart Study using SAS and R.

Grinnell College Global Learning Program

Mentors: Shannon Hinsa and Susan Ferguson

January 2018 – July 2018

• Travelled to Costa Rica, Cuba, and Denmark to gather data for individual research project, a comparative analysis of the EMS systems of Costa Rica, Cuba, and the U.S.

Publications

Under Preparation

- **2.** Shaw PA, **Yang JB**, Mowery DL, Schriver ER, Mahoney KB, Bar KJ, Ellenberg SS. *Determinants of COVID-19 Hospital Outcomes in the University of Pennsylvania Health System*.
- **1. Yang JB**, Shaw PA. Efficient Multi-Wave Sampling with the R Package optimall.

Presented Abstracts

1. Shaw PA, **Yang JB**, Mowery DL, Schriver ER, Mahoney KB, Ellenberg SS, Bar KJ. *Determinants of COVID-19 Hospital Outcomes in a Large Pennsylvania Health System.* Presented at the Conference of Retroviruses and Opportunistic Infections 2021 by Pamela Shaw.

Other relevant experience

Emergency Medical Technician

October 2015-June 2017

- State certified EMT-basic in Massachusetts.
- Responded to emergency calls in Bolton, MA as a volunteer.

Presentations

Determinants of COVID-19 Outcomes in the University *March 2021* **of Pennsylvania Health System**

University of Pennsylvania Department of Biostatistics, Epidemiology, and Informatics Research Day 2021

EMS in the Americas

April 2019

Grinnell College Undergraduate Research Symposium

Software	optimall: R package to efficiently conduct multi-wave sampling under two- or three-phase designs. Accompanied by a Shiny app for viewing the effect of splitting strata on optimum sample allocation. Package currently available on Github and expected to be submitted to CRAN soon.	
Honors and	CoSIDA Academic All-America	2020
scholarships	NHLBI Summer Institute in Biostatistics Scholars	hip 2019
	Grinnell College Dean's Scholarship	2017
Computing Skills	R, RMarkdown, Bioconductor, Git, Latex, SAS (intermediate).	
Memberships	International Biometrics Society, Eastern North America Region	March 2021 – Present
	Genetics Society of America	March 2021 – Present
	Grinnell College Biology Student Educational Policy Committee	August 2020 – Present