Jasper Yang

Email: yangjasp@grinnell.edu   **GitHub**: //yangjasp   **LinkedIn**: //jasper-yang

Phone: (617) 775-8066   **Personal Website:** //yangjasp-personalsite.netlify.app

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, Mentor: Pamela Shaw   *Sep. 2020 – Present*

- Conducted statistical analysis of data collected from electronic health records (EHR) to investigate 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

Trainee, Program Directors: Anita DeStefano and Jacqueline Milton   *June 2019 – July 2019*

- 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 scholarships	**CoSIDA Academic All-America**	*2020*
	NHLBI Summer Institute in Biostatistics Scholarship	*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 2020 – Present*
	Grinnell College Biology Student Educational Policy Committee	*August 2020 – Present*