Amy J. Pitts

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Data of Preparation

October 6, 2023

Education

08/2020 – 05/2025 *(Expected)*	Columbia University, New York NY PhD in Biostatistics *Thesis title:* Causal inference and survey methodologies for understanding prenatal anesthesia exposure, HIV health outcomes, and opioid use disorder treatments. Advisor: Dr. Caleb Miles
08/2016 – 05/2020	Marist College, Poughkeepsie NY B.S. with honors in Mathematics, *summa cum laude*, May 2020 Dual Majors: Applied Mathematics and Data Science & Analytics Minor: Computer Science

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Training

09/2023 – Present	T32 Substance Abuse Epidemiology Training Program Department of Epidemiology, Columbia University Advisors: Dr. Kara Rudolph & Dr. Caleb Miles

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Experience

Summer 2021	Biostatistics Graduate Research Internship Bristol Myers Squibb, NYC Early Clinical Trial Biostatistics Department
Summer 2019	Quantitative Sciences Undergraduate Research Experience (QSURE) Department of Epidemiology & Biostatistics Memorial Sloan Kettering Cancer Center. New York, NY Advisor: Dr. Sujata Patil
Summer 2018	Research Experience for Undergraduates (REU)

Department of Mathematics, Lafayette College. Easton, Pennsylvania
Advisor: Dr. Jeffery Liebner

Honors & Awards

2020	Marist College Excellence in Mathematics Award
2019 – 2020	President, Marist College Alpha Pi Chapter, Pi Mu Epsilon Honors Society
2019 – 2020	President and Founder, Association for Women in Mathematics Chapter at Marist College
2019	Outstanding Poster Award, Joint Mathematics Meetings
2018	Recipient of the Marist College Early Career Undergraduate Mathematics Research Award
2018	Awarded Best Visualization at DataFest located at Vassar College
2016 – 2020	Scholarship, Marist College Merit Scholarship

Academic Service

2021 – Present	Student Committee, Columbia Biostatistics Department Master Practicum Symposium - Chair 2023 - Member 2021–2022
2020 – Present	Planning Committee, Columbia University Biostatistics Computing Club
2019	Student Subcommittee Chair, Marist Math Department Faculty Search Committee

Professional Organizations and Societies

Memberships

03/2023 – Present	Eastern North American Region (ENAR) of the International Biometrics Society
05/2023 – Present	American Association for Public Opinion Research (AAPOR)

Educational Contributions

Direct Teaching

Summer 2023	Introduction to R for Data Science (13 enrolled students)

Teaching Assistant

Spring 2023	Department of Biostatistics, Columbia University

	Course: Data Science II
	Professor: Yifei Sun
Fall 2022	Department of Biostatistics, Columbia University
	Course: Statistical Methods for Causal Inference
	Professor: Linda Valeri
Spring 2022	Department of Biostatistics, Columbia University
	Course: Biostatistical Methods II
	Professor: Bin Cheng
Fall 2021	Department of Biostatistics, Columbia University
	Course: Introduction to Randomized Clinical Trials
	Professor: John LP Thompson
Spring 2021	Department of Biostatistics, Columbia University
	Course: Introduction to Data Science in R
	Professor: Cale Basaraba

Tutoring

2018 – 2020	Math Lab Lead Tutor
	Department of Mathematics, Marist College
	Supervised, trained, and administrated staff of six students.

Publications

Peer Reviewed Articles

1. Lawlor, M.K., Ng, V., Ahmed, S., Dershowitz, L., Brener, M.I., Kampaktsis, P., **Pitts, A.,** Vahl, T., Nazif, T., Leon, M. and George, I. (2023). Baseline characteristics and clinical outcomes of a tricuspid regurgitation referral population. *The American Journal of Cardiology*, *196*, (pp.22-30).
2. Lawlor, M., Ng, V.G., Ahmed, S., Dershowitz, L., Brener, M., Kampaktsis, P., **Pitts, A.,** Vahl III, T.P., Nazif, T., Leon, M.B. and George, I., 2023. Right Atrial Pressure in Pulmonary Hypertension Assessment in Tricuspid Regurgitation. *Journal of the American College of Cardiology*, *81*(8_Supplement), pp.1970-1970.
3. **Pitts, A.,** & Rivas, P. (2019). Finding Time Series Breakpoints with Fully Connected Neural Networks. In *Proceedings on the International Conference on Artificial Intelligence (ICAI)* (pp. 352-357). ISBN: 1-60132-501-0.

Select Works in Progress

1. **Pitts, A. J.,** & Fowler, C. R. (2023). Comparison of open-source software for producing directed acyclic graphs. *arXiv preprint arXiv:2305.12006*. (Under Review)
2. Duong, N. Q., **Pitts, A. J.,** Kim, S., & Miles, C. H. (2023). Sensitivity analysis for transportability in multi-study, multi-outcome settings. *arXiv preprint arXiv:2301.02904*.

Conference Activity

Contributed Talks

1. **Pitts, Amy.** Yomogida, Maiko. Aidala, Angela. Gelman, Andrew. Chen, Qixuan. "Inference of health outcomes among patients with HIV during covid-19 pandemic: using mrp model to improve survey representativeness", *American Association for Public Opinion Research (AAPOR)*. Philadelphia, PA. May 2023.
2. **Pitts, Amy**, & Rivas, Pablo. "Finding time series breakpoints with fully connected neural networks" *International Conference of Artificial Intelligence.* Las Vegas, NV. July 2019.
3. **Pitts, Amy.** Haglich, Kathryn. & Neitzel, Sarah. "A Bayesian method for locating breakpoints in time series" Joint Mathematics Meetings. Baltimore, MD. Jan 2019.

Posters

1. **Pitts, Amy**. Yomogida, Maiko. Aidala, Angela. Gelman, Andrew. Chen, Qixuan. "Inference of health outcomes among patients with HIV during covid-19 pandemic: using mrp model to improve survey representativeness", *Eastern North American Region (ENAR)* Poster Session. Mar 2023.
2. **Pitts, Amy.** Haglich, Kathryn. Neitzel, Sarah. & Liebner, Jeffery. "A Bayesian method for locating breakpoints in time series" ACM New York Celebration of Women in Computing. Lake George, NY. April 2019.
3. **Pitts, Amy.** Haglich, Kathryn. Neitzel, Sarah. & Liebner, Jeffery. "A Bayesian method for locating breakpoints in time series" Joint Mathematics Meeting. Baltimore, MD. January 2019.

Presentations

Invited Talks

1. **Pitts, Amy.** Ing, Caleb. Guo, Ling. Miles, Caleb. "Using a separable effects model to overcome extreme positivity violation and distinguish the causal effects of surgery and anesthesia" Columbia Biostatistics Annual Research Symposium (CBARS). Sept 2023.
2. **Pitts, Amy.** "Predicting Mesothelioma Disease Status Using Demographic, Clinical, and Exposure-Related Factors", Marist College Pi Mu Epsilon Induction Ceremony. May 2021

Campus/Other Talks

1. **Pitts, Amy**. Fowler, Charlotte. "Software to Draw DAGs", Causal Inference Learning Group, Biostatistics Department, Columbia University. Feb 2023.
2. **Pitts, Amy**. "R-Shiny Crash Course" Columbia Biostatistics Computing Club. Biostatistics Department, Columbia University. Nov 2022.
3. **Pitts, Amy**. Kwizera, Muhire. "Python Tutorial" Columbia Biostatistics Computing Club. Biostatistics Department, Columbia University. Zoom. Dec 2020.
4. **Pitts, Amy.** "SeminaR: tutorial on R-Shiny" Marist College Department of Mathematics. Poughkeepsie, NY. Nov 2019.
5. **Pitts, Amy.** "My Research Experience at Memorial Sloan Kettering Cancer Center" Marist College Department of Mathematics. Poughkeepsie, NY. Oct 2019.

6. **Pitts, Amy**. "Overleaf Overview" Department of Epidemiology and Biostatistics at Memorial Sloan Kettering Cancer Center. New York, NY. Aug 2019.
7. **Pitts, Amy**. "Missing Data in Cancer Studies" QSURE Final Presentations hosted in the Department of Epidemiology and Biostatistics at Memorial Sloan Kettering Cancer Center. New York, NY. July 2019.
8. **Pitts, Amy.** "My Research Experience at Lafayette College" Marist College Department of Mathematics. Poughkeepsie, NY. September 2018.