

CAROLYN LOU

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EDUCATION

University of Pennsylvania, Perelman School of Medicine Philadelphia, PA
PhD Candidate in Biostatistics, Graduate Group in Epidemiology and Biostatistics August 2017-Present
Advisor: Dr. Russell T. Shinohara

University of Pennsylvania, Perelman School of Medicine Philadelphia, PA
MS in Biostatistics, Graduate Group in Epidemiology and Biostatistics August 2017-June 2019
Advisor: Drs. Nandita Mitra and David Margolis
Thesis Title: Thymic Stromal Lymphopoietin Variation and the Persistence of Atopic Dermatitis: An Examination of Linkage Disequilibrium and Missingness in Longitudinal Studies

Washington University in St. Louis St. Louis, MO
BA, Double Major in Mathematics and Finance, Minor in Psychology September 2013-May 2017

RESEARCH

University of Pennsylvania, Department of Biostatistics, Epidemiology and Informatics
Lab Rotation with Dr. Mingyao Li September-December 2017
Lab Rotation with Dr. Rebecca Hubbard January-April 2018
Lab Rotation with Dr. Russell T. Shinohara June 2018-present

Washington University School of Medicine, Cancer Proteogenomics Lab of Dr. Li Ding
Undergraduate Research Assistant January 2015-May 2017

Washington University in St. Louis, Emotion and Mental Health Lab of Dr. Renee J. Thompson
Undergraduate Research Assistant January 2014-May 2015

TEACHING

EPID803: Biostatistics in Practice Spring 2020
Teaching Assistant
University of Pennsylvania, Biomedical Graduate Studies

BIOM611: Statistical Methods for the Design and Analysis of Experiments Spring 2019
Teaching Assistant
University of Pennsylvania, Biomedical Graduate Studies

MATH3200: Elementary to Intermediate Statistics and Data Analysis Spring 2017
Teaching Assistant
Washington University in St. Louis, Department of Mathematics and Statistics

MATH310: Foundations for Higher Mathematics Spring 2016
Teaching Assistant
Washington University in St. Louis, Department of Mathematics and Statistics

PRESENTATIONS

Weill Cornell Multiple Sclerosis Lab Meeting New York, NY
Oral Presentation January 2020
Title: "Automated Detection of Paramagnetic Rims in Multiple Sclerosis with MRI"

Western North American Region of the International Biometric Society (WNAR) Portland, OR
Poster Presentation June 2019
Title: "Pitfalls of Multi-Modal Image Segmentation in R"

PUBLICATIONS

Lou, Carolyn, Mohamad Habes, Nicholas A. Illenberger, Ali Ezzati, Richard B. Lipton, Hamed Akbari, Jimit Doshi, Christos Davatzikos, Russell T. Shinohara. "Augmenting clinical trials in neurologic disease by leveraging machine-learning-based predictive biomarkers." (*Under Review*)

Lou, Carolyn, Nandita Mitra, Bradley Wubbenhorst, Kurt D'Andrea, Ole Hoffstad, Brian S. Kim, Albert Yan et al. "Association between fine mapping thymic stromal lymphopoietin and atopic dermatitis onset and persistence." *Annals of Allergy, Asthma & Immunology* 123, no. 6 (2019): 595-601.

Niu, Beifang, Adam D. Scott, Sohini Sengupta, Matthew H. Bailey, Prag Batra, Jie Ning, Matthew A. Wyczalkowski, Wen-Wei Liang, Qunyuan Zhang, Michael D McLellan, Sam Q Sun, Piyush Tripathi, **Carolyn Lou** et al. "Protein-structure-guided discovery of functional mutations across 19 cancer types." *Nature genetics* 48, no. 8 (2016): 827.