

**Ryan Miller,
Assistant Professor**

Xavier University

CONTACT INFORMATION	Xavier University, 3800 Victory Parkway, Cincinnati, OH, 45207	phone: (815) 307-2803 email: millerr33@xavier.edu website: remiller1450.github.io
EDUCATION	University of Iowa , Iowa City, IA Ph.D., Biostatistics, August 2018 <ul style="list-style-type: none">Thesis: <i>Marginal False Discovery Rate Approaches to Inference on Penalized Likelihood Models</i>Advisor: Patrick Breheny, Ph.D M.S., Biostatistics, May 2015 <ul style="list-style-type: none">Preceptorship: <i>Analyzing the Geographic Dispersion of Accidents Involving Animal Strikes in Iowa using a Bayesian Spatio-temporal Model</i>Advisor: Jake Oleson, Ph.D Augustana College , Rock Island, IL B.A., Mathematics and Mathematics Education (Double Major), May 2011 <ul style="list-style-type: none">Graduated <i>Cum Laude</i>Advisor: Stacey Rodman, Ph.D	
PROFESSIONAL EXPERIENCE	Assistant Professor of Statistics Department of Mathematics Xavier University Role: Developed and taught courses in statistics, mentored and advised undergraduate students, performed statistical research	2020 to Present
	Visiting Assistant Professor of Statistics Department of Mathematics and Statistics Grinnell College Role: Developed and taught courses in statistics and data science, mentored undergraduate research projects, performed statistical research	2018 to 2020
	Research Assistant Iowa Public Policy Center, University of Iowa Supervisor: Elizabeth Momany, Ph.D Role: Statistical analysis as part of the State Innovation Model (SIM) for Iowa healthcare	2017 to 2018
	Research Assistant Iowa Public Policy Center University of Iowa Supervisor: Michelle Reyes, M.S. Role: Statistical analyses and data management on projects involving the Iowa Department of Transportation (IDOT) crash records database	2014 to 2017
	Consultant National Advanced Driving Simulator Organization University of Iowa Supervisor: Michelle Reyes, M.S. Role: Statistical support on projects involving teen driving research	2017 to 2018

TEACHING EXPERIENCE	Xavier University, Department of Mathematics	
	MATH 256 - Introduction to Probability and Statistics	Fall 2020
	MATH 156 - General Statistics	Fall 2020
	Grinnell College, Department of Mathematics and Statistics	
	STA 395 - Applied Data Science	Spring 2020
	STA 230 - Introduction to Data Science	Fall 2019
	STA 230 - Introduction to Data Science (two sections)	Spring 2019
	STA 209 - Applied Statistics	Spring 2020
	STA 209 - Applied Statistics (two sections)	Fall 2019
	STA 209 - Applied Statistics	Spring 2019
	STA 209 - Applied Statistics (two sections)	Fall 2018
	University of Iowa, Department of Biostatistics	
	BIOS 4120 - Introduction to Biostatistics (Instructor)	Summer 2014
	BIOS 4120 - Introduction to Biostatistics (Teaching Assistant)	Spring 2014
	BIOS 4120 - Introduction to Biostatistics (Teaching Assistant)	Fall 2013
	Pawnee High School, Pawnee IL	
	Calculus I, Algebra II w/ Trig, Algebra I, Advanced Algebra	2011-2012
RESEARCH INTERESTS	<ul style="list-style-type: none"> • High-dimensional data analysis • Penalized likelihood models • Large-scale inference and false discovery rates • Causal inference • Statistics and Data Science education • Statistical applications in driving research 	
PEER-REVIEWED PUBLICATIONS	1. Miller, R. , and Breheny, P “Marginal false discovery rate control for likelihood-based penalized regression models” <i>Biometrical Journal</i> . 2019; 1– 13. https://onlinelibrary.wiley.com/doi/abs/10.1002/bimj.201800138	
	2. Miller, R. , Brown, T, Lee, S*, Tibrewal, I*, Milavetz, G, Gaffney, G, Hartman, Hartman R, Huestis, M “Impact of Cannabis and Low Alcohol Concentration on Divided Attention Tasks during Driving” <i>Traffic Injury Prevention</i> . 2020 (to appear)	
	* indicates undergraduate student co-author	
MANUSCRIPTS IN PROGRESS	1. Miller, R. , and Breheny, P “Feature-specific inference for penalized regression using local false discovery rates” (In submission) Pre-print: https://arxiv.org/abs/1809.05497	
	2. Miller, R. , and Breheny, P “Marginal false discovery rates for group lasso selections” (In preparation)	
MENTORING	Mentored Advanced Projects (Grinnell College):	
	<ul style="list-style-type: none"> • Jindal, T, and Luo, Y “A latent variable approach for analyzing collision scenarios with application to driving simulator time-series data” (Summer 2019) 	
	<ul style="list-style-type: none"> • Accepted for poster presentation at the 2019 <i>Midstates Consortium for Math and Science</i> at University of Chicago 	

- Lee, S, and Tibrewal, I “Evaluating the impact of cannabis, with and without alcohol, on secondary tasks performed while driving” (Summer 2019)
 - Accepted for oral presentation at the 2019 *Midstates Consortium for Math and Science* at University of Chicago
 - Accepted for oral presentation at the 2020 *Association for the Advancement of Automotive Medicine* annual conference in Portland Oregon
 - Accepted for publication in *Traffic Injury Prevention*, 2020

Doctoral Committee Member:

- Peterson, R, University of Iowa, Department of Biostatistics (Spring 2019)

HONORS AND RECOGNITIONS

- William R. Clarke Graduate Teaching award recipient, University of Iowa 2018
- Outstanding Teaching Assistant nominee, University of Iowa 2013-14
- Pi Mu Epsilon honor society inductee, Augustana College chapter 2010
- Four-year letterman, Cross Country, Track and Field, Augustana College 2007-2011

PROFESSIONAL SERVICE

Referee for the following journals:

- Journal of Statistical Computation and Simulation (1)
- Computational Statistics and Data Analysis (1)
- Scientific Reports (1)

REFERENCES

Available upon request

Last updated: August, 2020