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EDUCATION	University of Iowa, Iowa City, IA	
	Ph.D., Biostatistics, August 2018	
	• Thesis: Marginal False Discovery Rate Appr	oaches to Inference on Penalized

- Likelihood Models
- Advisor: Patrick Breheny, Ph.D

M.S., Biostatistics, May 2015

- Preceptorship Topic: Analyzing the Geographic Dispersion of Accidents Involving Animal Strikes in Iowa using a Bayesian Spatio-temporal Model
- Advisor: Jake Oleson, Ph.D

Augustana College, Rock Island, IL

B.A., Mathematics and Mathematics Education (Double Major), May 2011

- ullet Graduated $Cum\ Laude$
- Advisor: Stacey Rodman, Ph.D

Teaching	Grinnell College, Department of Mathematics and Statistics	
Experience	STA 209 - Applied Statistics	Spring 2019
	STA 230 - Introduction to Data Science (two sections)	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	High-dimesional data analysis, penalized likelihood models, false discovery rates and
Interests	multiple comparisons, causal inference, statistics in sports, data science eduction

Research	Research Assistant	January 2017 to August 2018
Positions	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

Research Assistant August 2014 to January 2017 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 record database

CONSULTING EXPERIENCE

Consultant

June 2017 to August 2018

National Advanced Driving Simulator Organization,

University of Iowa

Supervisor: Michelle Reyes, M.S.

Role: Statistical support on projects involving teen driving research

PEER-REVIEWED PUBLICATIONS

1. **Miller, R**, and Breheny, P "Marginal false discovery rate control for likelihoodbased penalized regression models". *Biometrical Journal*. 2019; 1 13. https://onlinelibrary.wiley.com/doi/abs/10.1002/bimj.201800138

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/pdf/1809.05497.pdf
- 2. Askelson, N, Momany, E, **Miller, R**, Wright, B, Jones, M, Bentler, S, Damiano, P "A preliminary examination of Medicaid disenrollment: How a Medicaid Reform Designed to Increase Personal Responsibility Disrupted Coverage" (In submission)
- 3. **Miller, R**, and Breheny, P "Marginal false discovery rates for group lasso selections" (In preparation)

Mentoring

Undergraduate research (Grinnell College):

- Jindal, T, and Luo, Y "Evaluating Induced Exposure and Rate-based Risk Models with Application to Iowa DOT Crash Records" (Summer 2019)
- Lee, S, and Tibrewal, I "Statistical Analysis of the Impact of Impairment and Substance Use on Driving Performance" (Summer 2019)

Doctoral committee member (University of Iowa):

• Peterson, R "Ranked Sparsity: A Regularization Framework for Selecting Features in the Presence of Prior Informational Asymmetry" (Spring 2019)

HONORS AND RECOGNITIONS

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

References

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Joe Cavanaugh

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