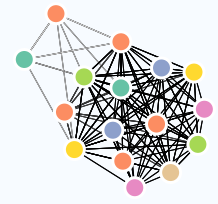


MEGAN HOLLISTER MURRAY



EDUCATION

Current
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2017

- **Ph.D. Candidate, Biostatistics**
Vanderbilt University Nashville, TN
 - False Discovery rates, Machine Learning methods, and Second Generation p-values
 - Expected graduation: Summer 2022

2017
|
2013

- **B.S., Mathematics**
Baylor University Waco, TX
 - Honors Thesis: Multi-Parameter Functions in Chaotic Dynamical Systems

RESEARCH EXPERIENCE

Current
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2020

- **Graduate Research Assistant**
Vanderbilt University Nashville, TN
 - Identifying determinants of racial disparities in lung cancer stage
 - Contributed to the research findings and writing of a \$1.25M multi-investigator federal grant

2020
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2018

- **NIH TL1 Trainee**
Vanderbilt University Nashville, TN
 - An evaluation of machine learning and classical statistical methods for discovery in large-scale translational data.
 - Compared machine learning methods and statistical inference methods for discovery in large-scale translational data. Found that traditional methods perform as well as machine learning methods.

2019
|
2018

- **Statistical Evidence in Data Science Lab**
Vanderbilt University Nashville, TN
 - "Large-Scale Inference" by Bradley Efron
 - A small group of students and professors read through and discussed in detail the first 6 chapters of Efron's book along with a selection of complimentary papers.

2017
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2015

- **Chaos Theory Lab**
Baylor University Waco, TX
 - "An Introduction to Chaotic Dynamical Systems" by Robert L. Devaney
 - Lab group carefully read and proved theorems and propositions from this book. Dr. Brian Raines guided us through the theory.

2016

- **Applied Mathematics Undergraduate Researcher**
North Carolina State University Raleigh, NC
 - Applied Mathematics Research Experience for Undergraduates
 - Mathematically modeled chemical absorption and metabolism through the skin. On a team of four undergraduate students mentored by a biochemist from the EPA.

CONTACT



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github.com/murraymegan



meganhmurray.com



[murraymegan25](https://www.linkedin.com/in/murraymegan25)

LANGUAGE SKILLS

R

Stata

Bash

Python

C++


The source code is available [on my GitHub](#).

Last updated on 2020-12-03.




TEACHING EXPERIENCE

Current
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2019

- **Probability & Statistical Inference**
Vanderbilt Data Science Department  Nashville, TN
 - Head TA
 - Masters course covers the fundamentals of probability theory and statistical inference.

2020

- **Contemporary Statistical Inference**
Vanderbilt Biostatistics Department  Nashville, TN
 - TA and lectured
 - Graduate course focuses on the goal(s) of statistical tools for inference.



SELECTED PUBLICATIONS, POSTERS, AND TALKS


2020

- **Factors Influencing Precision Medicine Knowledge and Attitudes**
PLOS One Paper
 - Authored with Rohini Chakravarthy, Sarah Stallings, Michael Williams, Mario Davidson, Juan Canedo, and Consuelo H. Wilkins.
 - Published November 11, 2020. <https://doi.org/10.1371/journal.pone.0234833>


2020

- **False Discovery Rate Computation: Illustrations and Modifications**
Arxiv Paper
 - Authored with Jeffrey D. Blume.
 - In process of being submitted to the R Journal. <https://arxiv.org/abs/2010.04680>


2019

- **An evaluation of machine learning and classical statistical methods for discovery in large-scale translational data.**
ENAR Conference Short Oral Presentation  Philadelphia, PA

2019

- **An evaluation of machine learning and classical statistical methods for discovery in large-scale translational data.**
ACTS Conference Poster Presentation  Washington D.C.
 - Ranked in top 25% of posters


2017

- **Modeling Dermal Diffusion and Metabolism for Consumer Products**
Joint Mathematics Meeting Poster Presentation  Atlanta, GA
 - Ranked in top 10% of posters




AWARDS AND SCHOLARSHIPS

2020
|
2017

- **The University Graduate Fellowship**
Vanderbilt University  Nashville, TN
 - Awarded by the Graduate School to highly qualified students entering study for the PhD or the master's degree.

2020
|
2019

- **Distinguished Teaching Assistant**
Vanderbilt Biostatistics Department  Nashville, TN
 - Awarded each year based on student recommendations for a helpful and intelligent TA.