$\mathcal{Lucy}$D'Agostino McGowan

www.lucymcgowan.com

 LucyMcGowan   LucyStats   0000-0001-7297-9359

EMPLOYMENT

2019-present	**Wake Forest University** *Assistant Professor, Department of Statistical Sciences*
2022-present	**Wake Forest University School of Medicine** *Secondary Joint Appointment, Department of Biostatistics and Data Science*
2018-2019	**Johns Hopkins Bloomberg School of Public Health** *Postdoctoral fellow with Jeffrey Leek*
2017 March-August	**RStudio** *Internship under Jenny Bryan developing the 'googledrive' R package*
2016-2017	**Vanderbilt University** *NIH Big Data to Knowledge Training Fellow*
2015-2016, 2017-2018	**Vanderbilt University** *Research Assistant, Department of Biostatistics and VA Tennessee Valley*
2015 Summer	**Cleveland Clinic** *Summer Graduate Fellow, Department of Quantitative Health Sciences*
2013 Summer	**Graham Colditz Laboratory** *Summer Intern, Washington University School of Medicine*
2012-2014	**Washington University School of Medicine** *Research Assistant, Gutmann Research Laboratory, Department of Neurology*
2012-2014	**Washington University School of Medicine** *Statistical Data Analyst, Department of Surgery, Division of Public Health*

Sciences

EDUCATION

PhD in Biostatistics, May 2018   VANDERBILT UNIVERSITY
Thesis: Improving Modern Techniques of Causal Inference: Finite Sample Performance of ATM and ATO Doubly Robust Estimators, Variance Estimation for ATO Estimators, and Contextualized Tipping Point Sensitivity Analyses for Unmeasured Confounding

MS in Biostatistics, December 2013   WASHINGTON UNIVERSITY SCHOOL OF MEDICINE
Thesis: Quantitative Assessment of the Community Research Fellows Training Program

BA in Religious Studies and Romance Languages University of North Carolina at Chapel Hill
with Distinction and Highest Honors

Invited Presentations

Johns Hopkins Department of Biostatistics Seminar Spring 2023 Oral Presentation
Lucy D'Agostino McGowan, "Design Principles of Data Analysis (Anticipated)."

U Mass Amherst Department of Biostatistics & Epidemiology Seminar Spring 2023
Oral Presentation
Lucy D'Agostino McGowan, "Statistical Communication (Anticipated)."

ASA Joint Statistical Meeting 2023 Oral Presentation
Lucy D'Agostino McGowan, "A Visual Diagnostic Tool for Causal Inference (Anticipated)."

CDC Statistical Advisory Group 2022 Oral Presentation
Lucy D'Agostino McGowan, "The Journey to True: Accurate Statistical Communication."

WFU Department of Biostatistics and Data Science Seminar 2022 Oral Presentation
Lucy D'Agostino McGowan, "Modern Statistical Communication in the Social Media Era."

R/Medicine 2022 Oral Presentation
Lucy D'Agostino McGowan, "ConTESSA: A shiny application to assist with evaluating the impact of COVID-19 test-trace-isolate programs."

Duke Clinical Research Institute Fellows Seminar Series Fall 2022 Oral Presentation
Lucy D'Agostino McGowan, "Statistical Myths and Misuse: Abandoning Outdated Statistical Practices."

ASA Joint Statistical Meeting 2021 Oral Presentation
Lucy D'Agostino McGowan, "Examining the Impact of Software Instruction on Completion of Data Analysis Tasks."

R-Ladies Baltimore 2021 Oral Presentation
Lucy D'Agostino McGowan, "Let's get meta: analyzing your R code with tidycode."

Wake Forest University BI and Analytics Meeting Februrary 2021 Oral Presentation
Lucy D'Agostino McGowan, "Hill's Criteria for the Data Scientist: Incorporating Causal Inference Techniques."

ENAR 2020 Oral Presentation
Lucy D'Agostino McGowan, "Tools for analyzing R code the tidy way."

SDSS 2020 ORAL PRESENTATION
Lucy D'Agositno McGowan, "Best Practices for Teaching R A Randomized Controlled Trial."

ASA Joint Statistical Meeting 2020 ORAL PRESENTATION
Lucy D'Agostino McGowan, "The Ups and Downs of Communicating Complex Statistics."

JupyterCon 2020 KEYNOTE
Lucy D'Agostino McGowan, "Equipping and empowering future data scientists with confidence, intuition, and communication skills."

CDC R Group 2020 ORAL PRESENTATION
Lucy D'Agostino McGowan, "ConTESSA: A Shiny App to Help Quantify Contact Tracing Efficacy."

Wake Forest School of Medicine Methods Conference 2020 ORAL PRESENTATION
Lucy D'Agostino McGowan, "Applied Demonstration of the tipr R Package."

Macalester College 2019 KEYNOTE
Lucy D'Agostino McGowan, "There and back again, a data scientist's tale."

ASA Joint Statistical Meeting 2019 ORAL PRESENTATION
Lucy D'Agostino McGowan, "Challenges in Augmenting Randomized Trials with Observational Health Records."

ENAR 2018 ORAL PRESENTATION
Lucy D'Agostino McGowan, Robert A. Greevy, Jr, "Exploring finite-sample bias in propensity score weights."

Data Day Texas 2018 ORAL PRESENTATION
Lucy D'Agostino McGowan, "Making Causal Claims as a Data Scientist: Tips and Tricks Using R."

ASA Joint Statistical Meeting 2018 ORAL PRESENTATION
Lucy D'Agostino McGowan, "Harnessing the Power of the Web via R Clients for Web APIs."

SAS Global Forum 2017 ORAL PRESENTATION
Lucy D'Agostino McGowan, "Streamline Your Workflow: Integrating SAS, LaTeX, and R into a Single Reproducible Document."

R-Ladies Nashville 2017 ORAL PRESENTATION
Lucy D'Agostino McGowan, "An R + GitHub Journey."

SAS Global Forum 2016 ORAL PRESENTATION
Lucy D'Agostino McGowan, Robert A. Greevy, Jr, "Integrating SAS and R to Perform Optimal Propensity Score Matching."

SAS Global Forum 2015 ORAL PRESENTATION
Lucy D'Agostino McGowan, Alice Toll, "Using PROC SURVEYREG and PROC SURVEYLOGISTIC to Assess Potential Bias."

SAS Global Forum 2014 ORAL PRESENTATION
Lucy D'Agostino McGowan, Melody S. Goodman, Kimberly A. Kaphingst, "Using SAS/STAT® Software to Validate a Health Literacy Prediction Model in a Primary Care Setting."

UPDATED DECEMBER 6, 2022

Invited Workshops and Panels

North Carolina Translational and Clinical Sciences Institute Panel
Lucy D'Agostino McGowan, "What is the value of the p-value?."

National Institute of Statistical Sciences Graduate Student Conference 2022 Panel
Lucy D'Agostino McGowan, "Tips for Statistical Communication and Data Storytelling."

The Wake Forest 2022 Conference on Analytics Impact 2022 Panel
Lucy D'Agostino McGowan, "Panel Discussion: Communicating during a pandemic: what worked, what didn't and what's next."

Rstudio::conf 2022 Workshop
Lucy D'Agostino McGowan and Malcolm Barrett, "Causal Inference in R."

Posit Tidymodels Team Workshop
Lucy D'Agostino McGowan and Malcolm Barrett, "Causal Inference in R."

ENAR 2021 Panel
Lucy D'Agostino McGowan, Caitlin Rivers, Eleanor Murray, Kareem Carr, Jeffrey Leek, "Communicating Complex Statistical Concepts to Collaborators, Stakeholders, and the General Public."

New York R Conference 2021 Workshop
Lucy D'Agostino McGowan and Malcolm Barrett, "Causal Inference in R."

R-Ladies NYC Panel
Lucy D'Agostino McGowan, Lynsie Daley, Kat Hoffman, Michael Kane, "Panel Discussion: Working with and learning from COVID-19 data."

ASA K-12 Virtual Workshops 2020 Workshop
Lucy D'Agostino McGowan and Shannon Ellis, "Using RStudio Cloud in the Classroom."

eCOTS 2020 Panel
Laura Le, Kari Lock Morgan, Lucy D'Agostino McGowan, "Panel: Engaging Students during the COVID-19 Health Crisis."

NC School of Science and Math Data Science Panel 2020 Panel
Lucy D'Agostino McGowan, "Data Science at Wake Forest University."

user!2020 Workshop
Lucy D'Agostino McGowan and Malcolm Barrett, "Causal Inference in R."

R in Governement Conference Workshop
Lucy D'Agostino McGowan and Malcolm Barrett, "Causal Inference in R."

ENAR 2019 Workshop
Lucy D'Agostino McGowan, "Data Visualizations with ggplot2."

Women in Statistics and Data Science 2017 Panel
Jenny Bryan, Mine Cetinkaya-Rundel, Lucy D'Agostino McGowan, Gabriela de Queiroz, Mine Dogucu, Katherine Scranton, Jennifer Thompson, "R-Ladies Panel: Improving gender diversity in a male-dominated community."

Contributed Presentations

ASA Joint Statistical Meeting 2022　　　　　　　　　　ORAL PRESENTATION

Lucy D'Agostino McGowan, "Design Thinking: Empirical Evidence for Six Principles of Data Analysis."

rstudio::global 2021　　　　　　　　　　　　　　　　ORAL PRESENTATION

Lucy D'Agostino McGowan, "Designing Randomized Studies using Shiny."

Women in Statistics and Data Science 2021　　　　　ORAL PRESENTATION

Lucy D'Agostino McGowan, "Bringing Data Science Communication into the Classroom."

ENAR 2017　　　　　　　　　　　　　　　　　　ORAL PRESENTATION

Lucy D'Agositno McGowan, Robert Alan Greevy, Jr, "Simplifying and Contextualizing Sensitivity to Unmeasured Confounding Tipping Point Analyses."

useR!2017　　　　　　　　　　　　　　　　　　ORAL PRESENTATION

Lucy D'Agostino McGowan, Nick Strayer, Jeff Leek, "papr: Tinder for pre-prints, a Shiny Application for collecting gut-reactions to pre-prints from the scientific community."

ASA Joint Statistical Meeting 2017　　　SPEED (ORAL + POSTER) PRESENTATION

Lucy D'Agostino McGowan, Robert A. Greevy, Jr, "Contextualizing Sensitivity Analysis in Observational Studies: Calculating Bias Factors for Known Covariates."

ASA Joint Statistical Meeting 2016　　　　　　　　　　　　　　POSTER

Lucy D'Agostino McGowan, Robert A. Greevy, Jr, "Practical Guidance and Tools for Rule-Out Sensitivity to Unmeasured Confounding Analyses."

ASA Joint Statistical Meeting 2016　　　　　　　　　ORAL PRESENTATION

Ryan Jarrett, Lucy D'Agostino McGowan, "Assessing the Association Between Accident Injury Severity and NCAP Car Safety Ratings"."

ASA Joint Statistical Meeting 2015　　　SPEED (ORAL + POSTER) PRESENTATION

Lucy D'Agostino McGowan, Alice Toll, "Census Tract-Level Disparities: Examining Food Swamps and Food Deserts."

141st American Public Health Association Annual Meeting 2013　　　　POSTER

Lucy D'Agostino McGowan, Melody S. Goodman, "Developing County-Level Estimates of Racial Disparities in Obesity Using Multilevel Reweighted Regression."

141st American Public Health Association Annual Meeting 2013　　ORAL PRESENTATION

Lucy D'Agostino McGowan, Melody S. Goodman, "Small Areal Estimation of Racial Disparities in Diabetes Using Multilevel Reweighted Regression."

SAS Analytics 2013 POSTER

Lucy D'Agostino McGowan, Patrick J. McGowan, "Mining Through Resumes: Utilizing SAS to Increase Efficiency and Objectivity in the Hiring Process."

Northeast SAS Users Group 2013 POSTER

Lucy D'Agostino McGowan, "SAS ® for Budgeting an Ideal Wedding."

Northeast SAS Users Group 2013 ORAL PRESENTATION

Lucy D'Agostino McGowan, Melody S. Goodman, "Using PROC GLIMMIX and PROC SGPLOT to Demonstrate County-level Racial Disparities in Obesity in North Carolina."

SAS Global Forum 2013 ORAL PRESENTATION

Lucy D'Agostino McGowan, Melody S. Goodman, "Multilevel Reweighted Regression Models to Estimate County-Level Racial Health Disparities Using PROC GLIMMIX."

PUBLICATIONS

+Indicates equal contributions

1. **D'Agostino McGowan L** (2022 (Accepted)). "Sensitivity Analyses for Unmeasured Confounders." *Current Epidemiology Reports.*

2. **D'Agostino McGowan L** (2022). "tipr: An R package for sensitivity analyses for unmeasured confounders." *Journal of Open Source Software*, *7*(77), 4495. doi: 10.21105/joss.04495 (URL: https://doi.org/10.21105/joss.04495), <URL: https://doi.org/10.21105/joss.04495>.

3. **D'Agostino McGowan L**, D'Agostino Sr RB, D'Agostino Jr RB (2022 (Accepted)). "A Visual Diagnostic Tool for Causal Inference." *Observational Studies.*

4. **D'Agostino McGowan L**, Peng RD, Hicks SC (2022). "Design Principles for Data Analysis." *Journal of Computational and Graphical Statistics*, 1-14. doi: 10.1080/10618600.2022.2104290 (URL: https://doi.org/10.1080/10618600.2022.2104290).

5. Rando HM, MacLean AL, Lee AJ, Ray S, Bansal V, Skelly AN, Sell E, Dziak JJ, Shinholster L, **D'Agostino McGowan L**, others (2021). "Pathogenesis, Symptomatology, and Transmission of SARS-CoV-2through Analysis of Viral Genomics and Structure." *mSystems.* doi: 10.1128/mSystems.00095-21 (URL: https://doi.org/10.1128/mSystems.00095-21).

6. Molino AR, Andersen KM, Sawyer SB, Đoàn LN, Rivera YM, James BD, Fox MP, Murray EJ, **D'Agostino McGowan L**, Jarrett BA (2022). "The Expert Next Door: Interactions With Friends and Family During the COVID-19 Pandemic." *American journal of epidemiology*, *191*(4), 552-556.

7. Fox M, Carr K, **D'Agostino McGowan L**, Murray E, Hidalgo B, Banack H (2021). "Will Podcasting and Social Media Replace Journals and Traditional Science Communication? No, but…" *American Journal of Epidemiology.*

8. Grantz KH, Lee EC, **D'Agostino McGowan L**, Lee KH, Metcalf CJE, Gurley ES, Lessler J (2021). "Maximizing and evaluating the impact of test-trace-isolate programs: A modeling study." *PLoS medicine*, *18*(4), e1003585.

9. +Cohen JB, +**D'Agostino McGowan L**, Jensen ET, Rigdon J, South AM (2021). "Evaluating sources of bias in observational studies of angiotensin-converting enzyme inhibitor/angiotensin II receptor blocker use during COVID-19: beyond confounding." *Journal of Hypertension*, *39*(4), 795.

10. **D'Agostino McGowan L**, Grantz KH, Murray E (2021). "Quantifying Uncertainty in Mechanistic Models of Infectious Disease." *American Journal of Epidemiology*, *190*(7), 1377-1385.

11. Fox MP, **D'Agostino McGowan L**, James BD, Lessler J, Mehta SH, Murray EJ (2020). "Concerns About the Special Article on Hydroxychloroquine and Azithromycin in High Risk Outpatients with COVID-19 by Dr. Harvey Risch." *American Journal of Epidemiology*.

12. **D'Agostino McGowan L**, Kross S, Leek J (2020). "Tools for Analyzing R Code the Tidy Way." *The R Journal*, *12*(1), 226-242. doi: 10.32614/RJ-2020-011 (URL: https://doi.org/10.32614/RJ-2020-011).

13. Liberman JS, **D'Agostino McGowan L**, Greevy RA, Morrow JA, Griffin MR, Roumie CL, Grijalva CG (2020). "Mental health conditions and the risk of chronic opioid therapy among patients with rheumatoid arthritis: a retrospective veterans affairs cohort study." *Clinical Rheumatology*, 1-10.

14. Griffin L, Carter M, D'Agostino Jr R, **D'Agostino McGowan L** (2019). "Comparative Effectiveness of Two Collagen-containing Dressings: Oxidized Regenerated Cellulose (ORC)/Collagen/Silver-ORC Dressing Versus Ovine Collagen Extracellular Matrix." *Wounds: a compendium of clinical research and practice*, *31*(11), E73.

15. Wickham H, Averick M, Bryan J, Chang W, **D'Agostino McGowan L**, François R, Grolemund G, Hayes A, Henry L, Hester J, Kuhn M, Pedersen TL, Miller E, Bache SM, Müller K, Ooms J, Robinson D, Seidel DP, Spinu V, Takahashi K, Vaughan D, Wilke C, Woo K, Yutani H (2019). "Welcome to the tidyverse." *Journal of Open Source Software*, *4*(43), 1686. doi: 10.21105/joss.01686 (URL: https://doi.org/10.21105/joss.01686).

16. Singh DP, Gabriel A, Silverman RP, Griffin LP, **D'Agostino McGowan L**, D'Agostino Jr RB (2019). "Meta-analysis Comparing Outcomes of Two Different Negative Pressure Therapy Systems in Closed Incision Management." *Plastic and Reconstructive Surgery Global Open*, *7*(6).

17. Pun BT, Balas MC, Barnes-Daly MA, Thompson JL, Aldrich JM, Barr J, Byrum D, Carson SS, Devlin JW, Engel HJ, Esbrook CL, Hargett KD, Harmon LR, Hielsberg C, Jackson JC, Kelly TL, Kumar V, Millner L, Morse A, Perme CS, Posa PJ, Puntillo KA, Schweickert WD, Stollings JL, Tan A, **D'Agostino McGowan L**, Ely EW (2019). "Caring for critically ill patients with the ABCDEF bundle: results of the ICU liberation collaborative in over 15,000 adults." *Critical Care Medicine*, *47*(1), 3-14.

18. Murff HJ, Roumie CL, Greevy RA, Hackstadt AJ, **D'Agostino McGowan L**, Hung AM, Grijalva CG, Griffin MR (2018). "Metformin use and incidence cancer risk: evidence for a selective protective effect against liver cancer." *Cancer causes & control : CCC*, *27*(10), 1-10.

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19. **D'Agostino McGowan L**, Roumie CL (2018). "Sulfonylureas as second line treatment for type 2 diabetes." *BMJ*, *362*.

20. Blume JD, **D'Agostino McGowan L**, Dupont WD, Greevy Jr RA (2018). "Second-generation p-values: Improved rigor, reproducibility, & transparency in statistical analyses." *PloS one*, *13*(3), e0188299.

21. Roumie CL, Min JY, **D'Agostino McGowan L**, Presley C, Grijalva CG, Hackstadt AJ, Hung AM, Greevy RA, Elasy T, Griffin MR (2017). "Comparative safety of sulfonylurea and metformin monotherapy on the risk of heart failure: a cohort study." *Journal of the American Heart Association*, *6*(4), e005379.

22. **D'Agostino McGowan L**, Bullen JA, Obuchowski NA (2016). "Location bias in ROC studies." *Statistics in Biopharmaceutical Research*, *8*(3), 258-267.

23. Drake BF, Brown K, **D'Agostino McGowan L**, Haslag-Minoff J, Kaphingst K (2016). "Secondary consent to biospecimen use in a prostate cancer biorepository." *BMC research notes*, *9*(1), 346.

24. **D'Agostino McGowan L**, Stafford JD, Thompson VL, Johnson-Javois B, Goodman MS (2015). "Quantitative evaluation of the community research fellows training program." *Frontiers in public health*, *3*, 179.

25. Chen Y, **D'Agostino McGowan L**, Cimino PJ, Dahiya S, Leonard JR, Lee DY, Gutmann DH (2015). "Mouse low-grade gliomas contain cancer stem cells with unique molecular and functional properties." *Cell reports*, *10*(11), 1899-1912.

26. Kaphingst KA, Stafford JD, **D'Agostino McGowan L**, Seo J, Lachance CR, Goodman MS (2015). "Effects of racial and ethnic group and health literacy on responses to genomic risk information in a medically underserved population." *Health Psychology*, *34*(2), 101.

27. Griffey RT, Kennedy SK, **D'Agostino McGowan L**, Goodman M, Kaphingst KA (2014). "Is low health literacy associated with increased emergency department utilization and recidivism?" *Academic Emergency Medicine*, *21*(10), 1109-1115.

28. Diggs-Andrews KA, Brown JA, Gianino SM, **D'Agostino McGowan L**, Rubin JB, Wozniak DF, Gutmann DH (2014). "reply." *Annals of neurology*, *75*(5), 800-801.

29. Fisher MJ, Loguidice M, Gutmann DH, Listernick R, Ferner RE, Ullrich NJ, Packer RJ, Tabori U, Hoffman RO, Ardern-Holmes SL, Hummel TR, Hargrave DR, Bouffet E, Charrow J, Bilaniuk LT, Balcer LJ, **D'Agostino McGowan L**, Liu GT (2014). "Gender as a disease modifier in neurofibromatosis type 1 optic pathway glioma." *Annals of Neurology*, *75*(5), 799-800.

30. Colditz GA, **D'Agostino McGowan L**, James AS, Bohlke K, Goodman MS (2014). "Screening for colorectal cancer: Using data to set prevention priorities." *Cancer Causes & Control*, *25*(1), 93-98.

31. **D'Agostino McGowan L**, Gennarelli RL, Lyons SA, Goodman MS (2013). "Using small-area analysis to estimate county-level racial disparities in obesity demonstrating the necessity of targeted interventions." *International journal of environmental research and public health*, *11*(1), 418-428.

Computing

Expert: R, Shiny, Git/GitHub, LaTeX, HTML/CSS, SAS

Familiar: Python, Stata, ArcGIS

Software

Author & Maintainer

ConTESSA: A Shiny Application developed in collaboration with the John Hopkins Infectious Disease Dynamics group to help contact tracing program managers.

pald: An R package to calculate partioned local depth (PaLD) probabilities for clustering

tipr: An R package with tools for conducting tipping point sensitivity analyses.

googledrive: An R package that interfaces with Google Drive from R, allowing users to seamlessly manage files on Google Drive from the comfort of their console.

contributr: A Shiny Application developed in collaboration with Maelle and rOpenSci for finding beginner GitHub issues to contribute to.

papr: Tinder for pre-prints, a Shiny Application developed in collaboration with Jeff Leek and Nick Strayer for collecting gut-reactions to pre-prints from the scientific community

Author

datasauRus: An R package made in collaboration with Steph Locke consisting of The Datasaurus Dozen, a set of datasets with the same summary statistics. They retain the same summary statistics despite having radically different distributions. The datasets represent a larger and quirkier object lesson that is typically taught via Anscombe's Quartet.

meetupr: An R package authored and maintained by R-Ladies to interface with the Meetup API

Contributer

cowsay: An R package that allows printing of character strings as messages/warnings/etc. with ASCII animals, including cats, cows, frogs, chickens, ghosts, and more.

RJafroc: And R package for analyzing data acquired using the Receiver Operating Characteristic paradigm and its extensions.

Teaching Experience

Wake Forest University

- (Spring) STA 379/679: Causal Inference (2022)
- (Spring) BEM 392: Math Business Capstone (2022)

- (Fall) STA 112: Introduction to Regression and Data Science (2022)
- (Spring) STA 363: Statistical Learning (2020)
- (Fall) STA 312: Linear Models (2020)
- (Fall) STA 363: Statistical Learning (2020)
- (Fall) STA 212: Statistical Modeling (2019)

Vanderbilt University

- Frank Harrell's Regression Modeling Strategies (2017)
- Statistical Collaboration in Health Sciences Teaching Assistant (2015)
- Modern Regression Analysis Teaching Assistant (2015)
- Principles of Modern Biostatistics Teaching Assistant (2015)

Washington University in St. Louis

- Introduction to SAS Teaching Assistant (2013)
- Introduction to Clinical Epidemiology Teaching Assistant (2013)
- Randomized Controlled Trials Teaching Assistant (2013)

Online Courses

- Measuring and Maximizing Impact of COVID-19 Contact Tracing (2020-2022)
- Creating dynamic dashboards with the shinydashboard R package (2019)
- Understanding data and statistics in the medical literature (2019)
- ggplot2 in 2: Learn the ggplot2 R package in 2 hours (2019)

Student Engagement

Undergraduate Theses

- Noah Edwards-Thro, *NBA Player Clustering Using Gaussian Mixture Modeling* (2021-2022)
- Jonathan Trattner, *Tools for Designing Online Randomized Trials Using the Shiny Framework* (2020-2021)
- Nuri Park, *Best Practices for Teaching R: A Randomized Controlled Trial* (2020-2021)
- Hannah Mendoza, *The Impact of Disclosing Uncertainty on Decision Making: A Randomized Controlled Trial* (2020)

Independent Studies

- Shawn Lang, *Propensity Score Models* (2022)
- Hannah Luebbering, *Studies on Teaching Programming: A Literature Review* (2020-2021)
- Iris Liu, *Building a Dashboard and Gaining Insight into Reynolda Museum Data*, URECA Wake Forest Research Fellowship (Funded Research) (2020)
- Sophia Fang, *Understanding Statistics and Data in The Medical Literature Course Update* (2020)

- Sofia Blankenship, *Building a Shiny Applications* (**Course Credit**) (2019)

Professional Activities

Internal Service

2022-2023 Committee member, Department Awards Committee

2022-2023 Committee member, Colloquium Committee

2022-2023 Secretary, Graduate Council

2020-2022 Wake Forest College Covid-19 Steering Committee Working Group

2020-2021 Peer Learning Community Facilitator, WFU Center for Advancement of Teaching

2020-2021 Statistics Hiring Committee Member

2020-2021 Committee member, Postdoc Hiring Committee

2020   Math Club Faculty Co-Chair

2019-2020 Faculty advisor, Wake Forest University ASA Student Chapter

2019-2020 Committee member, Statistics Curriculum Committee

Professional Service

2022   Chair elect, ASA Section on Statistical Graphics

2021-2022 Council on Emerging and New Statisticians Liason, ENAR Regional Advisory Board

2021   Chair, ASA Committee on Women in Statistics

2020-2022 Member, ENAR Regional Advisory Board

2020-2022 Committee of Presidents of Statistical Societies (COPSS) Communications Officer

2020-2021 Committee member, ENAR Program Committee

2020   Vice-chair, Chair-elect, ASA Committee on Women in Statistics

2019-2022 Associate Editor (Social Media), The American Journal of Epidemiology

2019-2021 ASA Council of Sections Representative, Section on Statistical Computing

2019-2021 Committee member, ASA Computing and Graphics Student Paper Award Selection Committee

2019   Committee member, ASA Committee on Women in Statistics

2019   Interim Program Chair, ASA Statistics Communication Interest Group

2018   Committee member, Women in Statistics and Data Science Service Project

2017-2018 President, Nashville ASA Student Chapter

2017   Panelist, Inaugural ASA Student Chapter Workshop

2016-2017 Vice President, Co-founder, Nashville ASA Student Chapter

2014   Abstract reviewer, Applied Public Health Statistics, American Public Health Association

Referee

Biostatistics, The American Statistician, BMJ Open, rOpenSci, American Journal of Epidemiology, Statistics in Medicine, Journal of the Royal Statistical Society, Nature Biotechnology, PLOS One, Observational Studies and *Biometrics*

OUTREACH

2022-2023 Founding co-organizer, Wake Forest University Florence Nightingale Day

2022 Co-organizer, WFU Conference on Communicating with Healthcare Data

2022 Chair, Data Jamboree ASA Section on Statistical Computing Symposium

2019-2022 Casual Inference Podcast co-host, sponsored by the American Journal of Epidemiology

2017-2018 President, Vanderbilt Biostatistics Graduate Student Association

2017-2018 Abstract reviewer, R-Ladies Global

2016-2019 Co-founder, Co-organizer, R-Ladies Nashville

2016-2017 President, Vanderbilt Graduate Student Council

2016-2017 Vice President, Vanderbilt Biostatistics Graduate Student Association

2016 useR Student Volunteer

2015-2016 Tutor, Tennessee Office of Refugees

2015 Scholar, Scholarship of Teaching and Learning

2014-2015 Vice President of Social Affairs, Vanderbilt Graduate Student Council

AWARDS

2020 JupyterCon Invited Keynote Speaker

2019 Winning team, ASA Leadership Challenge

2018 Vanderbilt Biostatistics Travel Award (ENAR)

2017 NASA Datanauts, Class of 2017

2017 useR!2017 Young Academic Scholarship

2017 Caucus for Women in Statistics Travel Award

2016 First Place, GSS Student Data Challenge, ASA Joint Statistical Meeting

2016 Second Place, SPAAC Poster Competition, ASA Joint Statistical Meeting

2016 Southern Startup Internship Program in Data Science (South BDHub)

2016 Vanderbilt Commodore Award in Biostatistics

2015 First Place, GSS Student Data Challenge, ASA Joint Statistical Meeting

2015 Prezi Student Ambassador

2014	SAS Student Scholar, PharmaSUG
2014	SAS Student Ambassador, SAS Global Forum 2014
2013	First Place, Student Research Competition, 141st APHA Annual Meeting
2013	Ellis R. Ott Scholarship: ASQ Statistics Division
2013	Best Contributed Paper in the Statistics and Data Analysis Section at SAS Global Forum
2013	SAS Student Scholar, NESUG
2013	SAS Student Ambassador, SAS Global Forum 2013
2012	Gertrude M. Cox Scholarship for Women in Statistics Honorable Mention
2012	NIAF Jim Cantalupo Scholarship
2011-2012	National Society of Leadership and Success
2011	Dunlevie Honors Undergraduate Research Award
2010	Programma Ponte Scholarship
2010	Newman Scholar
2009-2012	UNC Dean's List
2008-2012	UNC Public Service Scholar

GRANTS

Study of the Epidemiology of Pediatric Hypertension Registry (PI: Andrew South)
Wake Forest School of Medicine's Translational Research Initiative Joint Pilot Project
Role: Co-investigator
2020-2021

Maximizing and Evaluating the Impact of Contact Tracing Programs (PI: Emily Gurley)
Bloomberg Philanthropies
Amount: $15,000
Role: Consultant
2020-2021

Leadership and Character Course Redesign Grant
Wake Forest University Center for the Advancement of Teaching
WFU Amount: $1,000
Role: Course Designer
2020

A study of various methods to teach R programming
Wake Forest University Center for the Advancement of Teaching SoTL Seed Grant Fund
WFU Amount: $940
Role: Principle investigator
2019-2020

GRANTS (UNDER REVIEW)

The Study of the Epidemiology of Pediatric Hypertension (SUPERHERO) Registry:Validating Hypertension Classification with Baseline Cardiovascular Health and Target Organ Injury

>*NIH*
>
>Role: Subaward Principle investigator
>
>2022

Towards a Statistical Framework for Designing Studies Aimed at Molecular Surveillance and Phylogenetic Inference

>*NIH*
>
>Role: Subaward Principle investigator
>
>2022

Balanced Treatment Effect Subgroups with Matching and One-Step Machine Learning

>*PCORI*
>
>Role: Subaward Principle investigator
>
>2022

GRANTS (UNFUNDED)

Theoretical and empirical human behavioral data science to address the scientific reproducibility crisis (Submitted 2x)

>*NIH*
>
>Role: Principle investigator
>
>2020

Human Data Interaction: Examining Variation in the Data Analysis Pipeline

>*NSF*
>
>Role: Principle investigator
>
>2019

Equipping Early-Stage Data Science Students in the Southeast through Tiered Networks

>*NSF*
>
>Role: Co-investigator
>
>2021

Evaluating the T2 and Take Care programs: testing, tracing and supporting New York City residents in response to COVID-19

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