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KATHERINE HOFFMAN

EDUCATION

University of Washington, Seattle, WA — *Ph.D. in Biostatistics*		SEP 2023 – PRESENT
University of Michigan, Ann Arbor, MI — *M.S. in Biostatistics*		SEP 2016 – MAY 2018
University of Detroit Mercy, Detroit, MI — *B.S. in Biochemistry*		SEP 2011 – MAY 2015

PROFESSIONAL EXPERIENCE

Columbia University Medical Center, Department of Epidemiology, New York, NY

Senior Data Analyst   OCT 2022 – SEP 2023

- **Applied statistician** for Dr. Kara Rudolph's epidemiology research team. Implemented recently developed statistical methods on novel data sets with the goal of causal inference.
- **Led a study** using a retrospective Medicaid claims database of 20 million beneficiaries. Created and applied study eligibility criteria variables, generated hundreds of variables for the current and future analyses, and ran statistical analyses to assess the joint and independent effects of chronic pain and physical disability on the development of opioid use disorder.
- **Contributed** to multiple epidemiological papers-in-progress, e.g. a staggered intervention synthetic controls analysis with Amazon fulfillment centers as a county-level exposure, a tutorial on the superlearner optimal dynamic treatment rule for longitudinal data, and a longitudinal modified treatment policy application with an exposure of disability denial rates.
- **Mentored** a junior analyst on R programming, project organization, and causal inference.

Weill Cornell Medicine, Department of Biostatistics, New York, NY

Research Biostatistician III	NOV 2021 – OCT 2022
Research Biostatistician II	JUL 2020 – SEP 2021
Research Biostatistician I	AUG 2018 – JUN 2020

- **Primary Biostatistical Collaborator for Division of Pulmonary and Critical Care Medicine (PCCM)**: led study design, data management, statistical modeling, and manuscript writing in collaboration with clinicians, managed all projects requiring statistical support within PCCM; educated researchers on data repositories and contemporary tools in epidemiology and statistics; independently generated ideas for new research on acute and chronic lung diseases in a critical ill population.
- **Assisted Dr. Iván Díaz with illustrative applications** for novel causal inference methodology papers: developed analytical files, modified software, generated figures, wrote application sections.
- **Supervised four Research Biostatisticians:** met weekly with supervisees, assisted with project priorities, mentored direct reports technically and professionally.
- **Hiring co-manager** for new research biostatistician hires: reviewed applications, organized first-round interviews, screened candidates via 30 minute zoom call.
- **Teaching assistant** for MS Biostatistics and Data Science courses and **lecturer** for MS Clinical and Translational Investigation courses.
- **Host** of Biostatistics Computing Club: organized speakers and sessions once per month.

University of Michigan, Ann Arbor, MI

Graduate Student Research Assistant   FEB 2017 – MAY 2018

- **Dr. Peter Song's Biostatistics Lab**, Aug 2017-May 2018: Led the first year of a research project to associate air pollution with end stage renal failure using geospatial analysis methods. Prepared longitudinal pollution data for analysis, generated geospatial visualizations over time, and organized bi-weekly meetings with collaborators at Shanghai Jiao Tong University.
- **Dr. Jeffrey Kidd's Computational Biology Lab**, May 2017-Sept 2017: Searched for inversions in the dog genome using R, Python and UNIX. Debugged and validated human genome inversion detection techniques using the inveRsion and Variation using Long Range Information (VALOR) pipelines with positive canine inversion controls. Planned an analysis using Principal Component Analysis techniques with high-density single nucleotide polymorphism (SNP) data.
- **Dr. Monica Dus' Neuroscience and Epigenetics Lab**, Feb 2017-Feb 2018: Wrote reproducible R scripts for neuroscience PhD students to visualize feeding patterns of *Drosophila* from high-dimensional data sets.

SOFTWARE

Active: R, Rmarkdown/Quarto, LaTeX, git/Github, UNIX, SAS, Adobe InDesign/Fresco/Illustrator

Previous: Python, SQL, Matlab, Java, Maple

PUBLICATIONS

Statistical methodology

1. **Katherine L Hoffman**, Edward J Schenck, Michael J Satlin, William Whalen, Di Pan, Nicholas Williams, and Iván Díaz. Comparison of a Target Trial Emulation Framework vs Cox Regression to Estimate the Association of Corticosteroids With COVID-19 Mortality. *JAMA Network Open*, 2022;5(10) doi: 10.1001/jamanetworkopen2022.34425
2. **Katherine L Hoffman,** Diego Salazar, Nicholas T. Williams, Kara Rudolph, Iván Díaz. Introducing Longitudinal Modified Treatment Policies. *Epidemiology,* 2023.
3. Iván Díaz, **Katherine L Hoffman**, and Nima S Hejazi. Causal survival analysis under competing risks using longitudinal modified treatment policies. *Lifetime Data Analysis*, 2023
4. Iván Díaz, Nicholas Williams, **Katherine L Hoffman**, and Edward J Schenck. Nonparametric causal effects based on longitudinal modified treatment policies. *Journal of the American Statistical Association*, pages 1–16, 2021

Clinical applications

*Indicates co-first authorship.

5. **Katherine L Hoffman**, Floriana Milazzo, Nicholas T. Williams, Hillary Samples, Mark Olfson, Iván Díaz, Lisa Doan, Magdalena Cerda, Stephen Crystal, Kara E. Rudolph. Independent and joint contributions of physical disability and chronic pain to incident opioid use disorder and opioid overdose among Medicaid patients. *Psychological Medicine.* In press, 2023.
6. Edward J Schenck*, **Katherine L Hoffman***, Clara Oromendia, Elizabeth Sanchez, Eli J Finkelsztein, Kyung Sook Hong, Joseph Kabariti, Lisa K Torres, John S Harrington, Ilias I Siempos, et al. A comparative analysis of the respiratory subscore of the sequential organ failure assessment scoring system. *Annals of the American Thoracic Society*, 18(11):1849–1860, 2021
7. Luis G Gomez-Escobar*, **Katherine L Hoffman***, Justin J Choi, Alain Borczuk, Steven Salvatore, Sergio L Alvarez-Mulett, Manuel D Galvan, Zhen Zhao, Sabrina E Racine-Brzostek, He S Yang, et al. Cytokine signatures of end organ injury in covid-19. *Scientific reports*, 11(1):1–15, 2021
8. Edward J Schenck, **Katherine Hoffman**, Parag Goyal, Justin Choi, Lisa Torres, Kapil Rajwani, Christopher W Tam, Natalia Ivascu, Fernando J Martinez, and David A Berlin. Respiratory mechanics and gas exchange in covid-19–associated respiratory failure. *Annals of the American Thoracic Society*, 17(9):1158–1161, 2020
9. David R Price, **Katherine L Hoffman**, Clara Oromendia, Lisa K Torres, Edward J Schenck, Mary E Choi, Augustine MK Choi, Rebecca M Baron, Jin-Won Huh, and Ilias I Siempos. Effect of neutropenic critical illness on development and prognosis of acute respiratory distress syndrome. *American journal of respiratory and critical care medicine*, 203(4):504–508, 2021
10. David R Price, **Katherine L Hoffman**, Elizabeth Sanchez, Augustine MK Choi, and Ilias I Siempos. Temporal trends of outcomes of neutropenic patients with ards enrolled in therapeutic clinical trials. *Intensive care medicine*, 47(1):122–123, 2021

11. Edward J Schenck, **Katherine L Hoffman**, Marika Cusick, Joseph Kabariti, Evan T Sholle, and Thomas R Campion Jr. Critical care database for advanced research (cedar): An automated method to support intensive care units with electronic health record data. *Journal of Biomedical Informatics*, 118:103789, 2021

12. Lisa K Torres, **Katherine L Hoffman**, Clara Oromendia, Iván Díaz, John S Harrington, Edward J Schenck, David R Price, Luis Gomez-Escobar, Angelica Higuera, Mayra Pinilla Vera, et al. Attributable mortality of acute respiratory distress syndrome: a systematic review, meta-analysis and survival analysis using targeted minimum loss-based estimation. *Thorax*, 76(12):1176–1185, 2021

13. William Z Zhang, **Katherine L Hoffman**, Kristen T Schiffer, Clara Oromendia, Michelle C Rice, Igor Barjaktarevic, Stephen P Peters, Nirupama Putcha, Russell P Bowler, J Michael Wells, et al. Association of plasma mitochondrial dna with copd severity and progression in the spiromics cohort. *Respiratory research*, 22(1):1–11, 2021

14. Katerina Andreadis, **Katherine Hoffman**, Debra D'Angelo, and Lucian Sulica. Sulcus vocalis: Results of excision without reconstruction. *The Laryngoscope*, 130(9):2208–2212, 2020

15. Chang Su, **Katherine Hoffman**, Xu Zhenxing, Elizabeth Sanchez, Ilias Siempos, John S Harrington, Alexandra Racanelli, Maria Plataki, Fei Wang, and Edward J Schenck. Evaluation of Albumin Kinetics in Critically Ill Patients With Coronavirus Disease 2019 Compared to Those With Sepsis-Induced Acute Respiratory Distress Syndrome. *Critical Care Explorations:* Volume 3 - Issue 12 - p e0589. 2021

16. Kevin Ackerman, **Katherine L Hoffman**, Iván Díaz, Will Simmons, Karla V. Ballman, Rosy P. Kodiyanplakkal, Edward J. Schenck. Effect of Sepsis on Death as Modified by Solid Organ Transplantation. *Open Forum Infectious Diseases* (Vol. 10, No. 4, p. ofad148). US: Oxford University Press. 2023

17. David R Price*, Elisa Benedetti*, **Katherine L Hoffman**, Luis Gomez-Escobar, Sergio Alvarez-Mulett, Allyson Capili, Hina Sarwath, Christopher N Parkhurst, Elyse Lafond, Karissa Weidman, et al. Angiopoietin 2 is associated with vascular necroptosis induction in coronavirus disease 2019 acute respiratory distress syndrome. *The American journal of pathology*, 192(7):1001–1015, 2022

18. Karissa Weidman, Elyse LaFond, **Katherine L Hoffman**, Parag Goyal, Christopher N Parkhurst, Heather Derry-Vick, Edward Schenck, and Lindsay Lief. Post-intensive care unit syndrome in a cohort of covid-19 survivors in new york city. *Ann Am Thorac Soc*, pages 1158–1168, 2022

19. Chang Su, Zhenxing Xu, **Katherine Hoffman**, Parag Goyal, Monika M Safford, Jerry Lee, Sergio Alvarez-Mulett, Luis Gomez-Escobar, David R Price, John S Harrington, et al. Identifying organ dysfunction trajectory-based subphenotypes in critically ill patients with covid-19. *Scientific Reports*, 11(1):1–13, 2021

20. Aneela Rahman, Eva Schelbaum, **Katherine Hoffman**, Iván Díaz, Hollie Hristov, Randolph Andrews, Steven Jett, Hande Jackson, Andrea Lee, Harini Sarva, et al. Sex-driven modifiers of alzheimer risk: a multimodality brain imaging study. *Neurology*, 95(2):e166–e178, 2020

21. William Z Zhang, Michelle C Rice, **Katherine L Hoffman**, Clara Oromendia, Igor Z Barjaktarevic, J Michael Wells, Annette T Hastie, Wassim W Labaki, Christopher B Cooper, Alejandro P Comellas, et al. Association of urine mitochondrial dna with clinical measures of copd in the spiromics cohort. *JCI insight*, 5(3), 2020

22. Tariq Chukir, Yi Liu, **Katherine Hoffman**, John P Bilezikian, and Azeez Farooki. Calcitriol elevation is associated with a higher risk of refractory hypercalcemia of malignancy in solid tumors. *The Journal of Clinical Endocrinology & Metabolism*, 105(4):e1115–e1123, 2020

23. Christian P Soneru, Charles A Riley, **Katherine Hoffman**, Abtin Tabaee, and Theodore H Schwartz. Intra-operative mri vs endoscopy in achieving gross total resection of pituitary adenomas: a systematic review. *Acta Neurochirurgica*, 161(8):1683–1698, 2019

24. Alberto Pinsino, Giulio M Mondellini, Eugene A Royzman, **Katherine L Hoffman**, Debra D'Angelo, Melissa Mabasa, Antonia Gaudig, Amelia M Zuver, Amirali Masoumi, A Reshad Garan, et al. Cystatin c-versus creatinine-based assessment of renal function and prediction of early outcomes among patients with a left ventricular assist device. *Circulation: Heart Failure*, 13(1):e006326, 2020

25. Harpreet S Bhatia, Joseph Bailey, Ozan Unlu, **Katherine Hoffman**, and Robert J Kim. Efficacy and safety of direct oral anticoagulants in patients with atrial fibrillation and chronic kidney disease. *Pacing and Clinical Electrophysiology*, 42(11):1463–1470, 2019

26. Jamuna K Krishnan, Mangala Rajan, Benjamin R Baer, **Katherine L Hoffman**, Mark N Alshak, Kerri I Aronson, Parag Goyal, Chiomah Ezeomah, Shanna S Hill, Fernando J Martinez, et al. Assessing mortality differences across acute respiratory failure management strategies in covid-19. *Journal of Critical Care*, 70:154045, 2022

27. Uqba Khan, Cristian Pena, Julianna Brouwer, **Katherine Hoffman**, Arindam Roy Choudhury, Chao Zhang, Prashant Thakkar, Doron Betel, Sandipto Sarkar, Gregory Sonnenberg, et al. Impact of antibiotic use on response to treatment with immune checkpoint inhibitors. *American Journal of Clinical Oncology*, 2019

28. Maria Plataki, Di Pan, Parag Goyal, **Katherine Hoffman**, Jacky Man Kwan Choi, Hao Huang, Monika M Safford, and Edward J Schenck. Association of body mass index with morbidity in patients hospitalised with covid-19. *BMJ open respiratory research*, 8(1):e000970, 2021

29. Elizabeth Mauer, Jihui Lee, Justin Choi, Hongzhe Zhang, **Katherine L Hoffman**, Imaani J Easthausen, Mangala Rajan, Mark G Weiner, Rainu Kaushal, Monika M Safford, et al. A predictive model of clinical deterioration among hospitalized covid-19 patients by harnessing hospital course trajectories. *Journal of biomedical informatics*, 118:103794, 2021

30. Jamuna K Krishnan, Kayley M Ancy, Clara Oromendia, **Katherine L Hoffman**, Imaani Easthausen, Nancy K Leidy, MeiLan K Han, Russell P Bowler, Stephanie A Christenson, David J Couper, et al. Characterizing copd symptom variability in the stable state

utilizing the evaluating respiratory symptoms in copd instrument. *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, 9(2):195, 2022 39.

31. Xiaoping Wu, Yunju Jeong, Sergio Poli de Frias, Imaani Easthausen, **Katherine Hoffman**, Clara Oromendia, Shahrad Taheri, Anthony J. Esposito, Luisa Quesada Arias, Ehab A. Ayaub, et al. Differential protein expression in rheumatoid arthritis interstitial lung disease. To appear in *Thorax*, 2022.

32. Emily Coskun, Ramsey Kalil, Andrew Yin, Graham Wehmeyer, **Katherine Hoffman**, Rohini Kopparam, Parah Goyal, Robert Kaner, and Eugenia Siegler. Outcomes of the oldest old admitted with covid-19. *Journal of Palliative Care, 2022*.

33. Jade I Basem, Anna F Roth, Robert S White, Virginia E Tangel, Silis Y Jiang, Jacky M Choi, **Katherine L Hoffman**, et al. Patient care in rapid-expansion intensive care units during the covid-19 pandemic crisis. *BMC anesthesiology*, 22(1):1–11, 2022

34. Richa Batra, Rie Uni, Oleh M. Akchurin, Sergio Alvarez-Mulett, Luis G. Gómez-Escobar, Edwin Patino, **Katherine L. Hoffman**, Will Simmons, et al. Multi-omic comparative analysis of COVID-19 and bacterial sepsis-induced ARDS. *To appear in PLOS Pathogens.* 2022.

35. Mustafa Buyukozkan, Sergio Alvarez-Mulett, Alexandra C Racanelli, Frank Schmidt, Richa Batra, **Katherine L Hoffman,** Hina Sarwath, Rudolf Engelke, Luis Gomez-Escobar, Will Simmons, et al. Integrative metabolomic and proteomic signatures define clinical outcomes in severe COVID-19. *iScience.* 2022 Jul 15;25(7):104612. doi: 10.1016/j.isci.2022.104612.

36. Juliet Aizer, Erika L Abramson, Jessica R Berman, Stephen A Paget, Marianna B Frey, Victoria Cooley, Ying Li, **Katherine L Hoffman**, et al. An Instrument for Measuring Critical Appraisal Self-Efficacy in Rheumatology Trainees. *To appear in ACR Open Rheumatology.* 2022.

37. Parag Goyal, Justin J. Choi, Laura C. Pinheiro, Edward J. Schenck, Ruijun Chen, Assem Jabri, Michael J. Satlin, Thomas R. Campion, Jr., Musarrat Nahid, Joanna B. Ringel, **Katherine L. Hoffman**, et al. Clinical characteristics of covid-19 in new york city. *New England Journal of Medicine*, 382(24):2372–2374, 2020

38. Moritz Reiterer, Mangala Rajan, Nicolás Gómez-Banoy, Jennifer D Lau, Luis G Gomez-Escobar, Lunkun Ma, Ankit Gilani, Sergio Alvarez-Mulett, Evan T Sholle, Vasuretha Chandar, Yaron Bram, **Katherine Hoffman**, et al. Hyperglycemia in acute COVID-19 is characterized by insulin resistance and adipose tissue infectivity by SARS-CoV-2. *Cell metabolism*, 33(11)2174–2188, 202129.

39. Greer Waldrop, Seyed A. Safavynia, Megan E. Barra, Sachin Agarwal, David A. Berlin, Amelia K Boehme, Daniel Brodie, Jacky M. Choi, Kevin Doyle, Joseph J. Fins, Wolfgang Ganglberger, **Katherine Hoffman**, et al. Prolonged unconsciousness is common in covid-19 and associated with hypoxemia. *Annals of neurology*, 2022

40. Richa Batra, Rie Uni, Oleh M. Akchurin, Sergio Alvarez-Mulett, Luis G. Gomez-Escobar, Edwin Patino, **Katherine L. Hoffman**, Will Simmons, Kelsey Chetnik, Mustafa Buyukozkan, Elisa Benedetti, et al. Urine-based multi-omic comparative analysis of COVID-19 and bacterial sepsis-induced ARDS. *Molecular Medicine,* 29(1), p.13., 2023.

41. Parag Goyal, Joanna Bryan Ringel, Mangala Rajan, Justin J Choi, Laura C Pinheiro, Han A Li, Graham T Wehmeyer, Mark N Alshak, Assem Jabri, Edward J Schenck, Ruijun Chen, Michael J Satlin, Thomas R Campion Jr, Musarrat Nahid, Maria Plataki, **Katherine L Hoffman**, et al. Obesity and covid-19 in new york city: a retrospective cohort study. *Annals of internal medicine*, 173(10):855–858, 2020

42. Lauren E. Dang, Susan Gruber, Hana Lee, Issa J. Dahabreh, Elizabeth A. Stuart, Brian D. Williamson, Richard Wyss, Iván Díaz, Debashis Ghosh, Emre Kıcıman, Demissie Alemayehu, **Katherine L. Hoffman**, et. al. A causal roadmap for generating high-quality real-world evidence. *Journal of Clinical and Translational Science, 7*(1), E212, 2023. doi:10.1017/cts.2023.635

43. Michael J Satlin, Liang Chen, Angela Gomez-Simmonds, Jamie Marino, Gregory Weston, Tanaya Bhowmick, Susan K Seo, Steven J Sperber, Angela C Kim, Brandon Eilertson, Sierra Derti, Stephen G Jenkins, Michael H Levi, Melvin P Weinstein, Yi Wei Tang, Tao Hong, Stefan Juretschko, **Katherine L Hoffman**, et al. Impact of a rapid molecular test for klebsiella pneumoniae carbapenemase and ceftazidime-avibactam use on outcomes after bacteremia caused by carbapenem-resistant enterobacterales. *Clinical Infectious Diseases*, 2022.

Manuscripts under review

44. Neville Dusaj, **Katherine L Hoffman**, Edward Schenck. Lost in a number: Concealed heterogeneity within severity of illness scores. Under review at *Critical Care*.

45. John S. Harrington, **Katherine L Hoffman**, Elizabeth Sanchez, Paris Ayana Dattilo, Theodore J. Gaeta, et al. Association between mitochondrial DNA and mortality of patients presenting to the emergency department with suspected sepsis: the prospective, double-site MBOSS study. Under review at *Journal of Clinical Insights*.

46. Nicholas T. Williams, **Katherine L Hoffman**, Iván Díaz, Kara Rudolph. Learning Optimal Dynamic Treatment Regimes from Longitudinal Data. Under review at *American Journal of Epidemiology*.

47. William Z. Zhang, Will Simmons, Kihwan Kim, Sebastian E. Carrasco, **Katherine L. Hoffman**, Sean Houghton, Leora Haber, Parag Goyal, Karla V. Ballman, Augustine M. K. Choi, Maria Plataki, David Redmond, Edward J. Schenck, Suzanne M. Cloonan. Targeted deletion of macrophage ferritin heavy chain protects from macrophage ferroptosis in acute respiratory distress syndrome. Under review at *Cell Metabolism*.

Non-peer reviewed work

48. **Katherine L Hoffman**. Covid-19: a view from the sidelines. *Significance*, 18(1):40–43, 2021

49. **Katherine L Hoffman**. A beautiful affliction: Tracing the role of mentally ill artists in reducing the negative stigma of mental illness, University of Detroit Mercy Undergraduate Thesis for fulfillment of the Honors Program, 2015.

TEACHING

Teaching Assistant

- *Modern Methods for Causal Inference.* Weill Cornell Medicine – Summer 2019, 2020, and 2021. Spring 2022.
- *Introduction to Health Services Research.* Weill Cornell Medicine – Fall 2021.
- *Biostatistics II.* Weill Cornell Medicine – Winter 2019.
- *Data Science I.* Weill Cornell Medicine – Fall 2019.

Blog posts (selected)
- A Day in the Life of a Biostatistician. KH Stats – April 2019.
- Stats on Drugs: Interview with a Pharma-CRO Biostatistician. KH Stats – Nov 2019.
- An Illustrated Guide to Superlearning. KH Stats – Oct 2020.
- An Illustrated Guide to Targeted Maximum Likelihood Estimation. [3-part series] KH Stats – December 2020.
- Customizable Correlations Plots in R. KH Stats – June 2022.
- An Illustrated Introduction to Modified Treatment Policies. KH Stats – April 2022.
- Conditional and Iterated Expectations as Linear Regression Models – July 2020.
- Swimmer Plots for Multiple Variables using ggplot2. KH Stats – June 2022.
- Statistical Intuition for Optimal Treatment Regimes. KH Stats – July 2022.
- Annotated Forest Plots using ggplot2. KH Stats – December 2022.

Visual guides for causal inference
- G-computation
- Inverse Probability Weighting
- Targeted Maximum Likelihood Estimation
- Augmented Inverse Probability Weighting
- Superlearning

TALKS

Invited

- Corticosteroids for COVID-19 in a Longitudinal Target Trial Emulation Framework. Inria Causal Inference Learning Group – Paris, France (Remote) – January 2023.
- Comparison of a Target Trial Emulation Framework to Cox Regression to Estimate the Effect of Corticosteroids on COVID-19 Mortality. Dr. Fei Wang's Laboratory Meetings – New York, NY (Remote) – September 2022.
- Swimmer Plots using ggplot2. R/Medicine conference – Remote – Aug 2022.
- Communicating with a Statistician. Weill Cornell Medicine – July 2022.
- Introduction to Longitudinal Data Analysis I and II. Weill Cornell Medicine – March 2020, 2021, and 2022.
- Big Data and Statistical Learning for Pulmonary and Critical Care. Weill Cornell Medicine –April 2022.
- Learning Impact of Air Pollution on Kidney Disease Epidemiology in US and East China Using Big Public Health Data. Shanghai Jiao Tong University. Shanghai, China – March 2018.

Contributed

- Swimmer Plots using ggplot2. Weill Cornell Medicine Biostatistics Computing Club – New York, NY – September 2022.
- Corticosteroids in COVID-19: Optimizing Observational Research through Target Trial Emulations. American Causal Inference Conference. Berkeley, CA – May 2022.

- Tips and Tricks for Table 1's. Weill Cornell Medicine Biostatistics Computing Club – New York, NY – July 2022.
- Introduction to Ensemble Learning. Weill Cornell Medicine Biostatistics Computing Club – New York, NY – Jan 2021.
- Power Calculations in R. Weill Cornell Medicine Biostatistics Computing Club – New York, NY – Jan 2020.
- Become a super learner! Introduction to super learning and the sl3 package. NYC R-Ladies – New York, NY – Sept 2019.
- R Projects, the here package, and other tips from the NYC R Conference. Weill Cornell Medicine Biostatistics Computing Club – New York, NY – June 2019.
- Fireproof your Computer from Jenny Bryan! Learn the here package. NYC R-Ladies Lightning Talks – New York, NY – June 2019.
- Overview of dplyr: Weill Cornell Medicine Biostatistics Computing Club. New York, NY – March 2019.

POSTERS

- Estimating the Causal Effect of Sepsis on Mortality in Intensive Care Unit patients with and without a solid organ transplant. Joint Statistical Meetings – Remote – Aug 2020.
- Estimating the Causal Effect of Digoxin using Marginal Structural Models. Joint Statistical Meetings – Denver, CO – Aug 2019.
- Learning Impact of Air Pollution on Kidney Disease Epidemiology in US and East China Using Big Public Health Data. Michigan Institute for Data Science Symposium – Ann Arbor, MI – Nov 2017.

HONORS & AWARDS

- NSF Early Career Researchers Travel Scholarship – May 2022.
- University of Michigan Graduate Student Research Assistant Tuition Scholarship – 2017-2018.
- University of Detroit Mercy Division I Softball and Academic Merit Full Tuition Scholarship – 2011-2015.
- University of Detroit Mercy Leadership Pin – April 2015.
- University of Detroit Mercy Honors program graduate – April 2015.
- University of Detroit Mercy *Magna Cum Laude* – April 2015.

LEADERSHIP

- Co-host of Weill Cornell Medicine Biostatistics Computing Club – New York, NY – 2020-2022.
- Host of Weill Cornell Medicine causal inference reading group – New York, NY – 2019-2020.
- Co-president of Michigan Biostatistics Student Association – Ann Arbor, MI – 2017-2018.
- Head coach of Milan Junior Varsity softball team – Milan, MI – 2016.
- Co-captain of NCAA Division I softball team – Detroit, MI – 2014-2015.
- Team representative for NCAA Student-Athlete Advisory Committee – Detroit, MI – 2013-2015.

SERVICE

- Peer reviewer: *British Medical Journal* and *American Journal of Respiratory and Critical Care Medicine*. 2022-present.
- University of Michigan Statistics in the Community (STATCOM) volunteer – primary project: data analytics for Ozone House for at-risk teenagers' emergency call center – Ann Arbor, MI – 2016-2018.
- Volunteer analyst – data visualizations for St. Joseph Mercy Hospital line infections – Ann Arbor, MI – 2017-2018.
- Fastpitch pitching coach for girls aged 10-16 – Milan, MI – 2013-2018.
- Volunteer at Gleaners Food Bank – Detroit, MI – 2012-2015.
- Volunteer at Boys and Girls Club – Detroit, MI – 2011-2015.
- Volunteer at Henry Ford Hospital – Detroit, MI – 2012-2013.