Nina Galanter

galantn@mskcc.org

Updated July 2025

EDUCATION

University of Washington, Seattle, WA
Ph.D., Biostatistics, June 2025
Dissertation: Topics in Causal Inference for Individualized Treatment
Advisors: Marco Carone and Alex Luedtke

Grinnell College, Grinnell, IA
B.A., Mathematics, May 2018

RESEARCH EXPERIENCE

GRADUATE STUDENT RESEARCHER

Topics in causal inference for individualized treatment, September 2020 – June 2025
Department of Biostatistics, University of Washington, Seattle, WA
Dissertation, Advisors: Alex Luedtke, Ph.D. and Marco Carone, Ph.D.

- First project involved bounding the benefit of an optimal treatment rule using summary statistics. Results published and R package implementing method is on GitHub.
- Second two projects involved methods for estimation and inference for optimal treatment rules considering a primary outcome and a risk outcome. Methods incorporate machine learning. Manuscript and R package are in preparation.
- Primary application is medication treatment for depression using electronic health records.

Improving communication about serious illness – hospital study, September 2024 – Present
Department of Biostatistics, University of Washington, Seattle, WA
Supervisor: Lyndia Brumback, Ph.D.

- Conducted the statistical analysis for the clinical trial for an intervention to facilitate goals-of-care discussions between patients and providers in a hospital critical care setting.
- Outcomes of interest, from electronic health record and survey data, included natural language processing-derived outcomes, intensity of care outcomes, and patient-reported outcomes.

Pediatric vaccination in pharmacies and well-child visits, June 2023 – January 2025
Comparative Health Outcomes, Policy, and Economics Institute, University of Washington
Seattle, WA

- Contributed to the statistical analysis plan and edited the manuscript, now published, for a retrospective cohort study using health care claims data.

RSV correlates of protection in hematopoietic transplant recipients, June 2023 – Present
Vaccine and Infectious Disease Division, Fred Hutch Cancer Research Center, Seattle, WA
Principal Investigator: Jim Boonyaratanakornkit, Ph.D.

- In collaboration with research team, created a statistical analysis plan, conducted the analysis, and am contributing to the manuscript for a time-to-event analysis of an observational cohort.

Ranking tailoring variables for constructing treatment rules, March 2020 – September 2024
Kaiser Permanente Washington Health Research Institute, Seattle, WA
Supervisor: Susan Shortreed, Ph.D.

- Multiple projects about using marginal structural models to estimate optimal treatment rules and their values. One paper published and another manuscript submitted.
- Methods applied to clinical trial data and electronic health records data.

CONSULTING

Statistical Consultant, January 2022 – March 2022
Department of Biostatistics, University of Washington, Seattle, WA
Supervisors: Katie Kerr, Ph.D., and Tamre Cardoso, Ph.D

- Led and participated in hour-long consulting sessions for researchers across the University of Washington on topics including study design, analysis plan, and implementation in R.
- With another student, created and implemented an analysis plan and wrote a report about the association between receiving a left ventricular assist device and time to heart transplant.

UNDERGRADUATE STUDENT RESEARCHER

Efficient communication in distributed machine learning, June 2017 – August 2017
Institute for Pure and Applied Mathematics RIPS Program, Hong Kong
Supervisor: Albert Ku, Ph.D.

Machine learning for the classification of toxicological effects, May 2016 – August 2016
Department of Mathematics, North Carolina State University, Raleigh, NC
Supervisor: Hien Tran, Ph.D.

Evolutionary biology and game theory: the territorial raider game, May 2015 – July 2015
Mathematics and Statistics Dept., University of North Carolina Greensboro, Greensboro, NC
Supervisor: Jan Rychtář, Ph.D.

PUBLICATIONS

Bhardwaj, S., **Galanter, N.**, Berenbrok, L.A., Shah P.D, Bacci, J.L. (2025). Pediatric Vaccination in Pharmacies is not Associated with Delayed Well-Child Visits Among Commercially Insured Children. *Health Affairs Scholar.* https://doi.org/10.1093/haschl/qxaf028

Galanter, N., Carone, M., Kessler, R.C., Luedtke, A. (2024). Can the potential benefit of individualizing treatment be assessed using trial summary statistics alone? *American Journal of Epidemiology*
https://doi.org/10.1093/aje/kwae040

Wu, J., **Galanter, N.**, Shortreed, S. M., Moodie, E. E. M. (2022). Ranking tailoring variables for constructing individualized treatment rules: an application to schizophrenia. *Journal of the Royal Statistical Society: Series C.*
https://rss.onlinelibrary.wiley.com/doi/10.1111/rssc.12533

Galanter, N., Silva, D., Jr., & Rowell, J., Rychtář, J. (2017). Resource Competition Amid Overlapping Territories: The Territorial Raider Model Applied to Multi-Group Interactions. *Journal of Theoretical Biology.*
http://dx.doi.org/10.1016/j.jtbi.2016.10.007

Galanter, N., Silva, D., Jr., Rychtář, J., & Rowell, J. (2016). The Territorial Raider Game and Graph Derangements. *Discrete Applied Mathematics.*
http://dx.doi.org/10.1016/j.dam.2016.03.016

TEACHING EXPERIENCE

INSTRUCTOR

Data Analysis and Reporting (Co-instructor), University of Washington

Spring 2025

- Graduate-level course on conducting data analyses. Using real data examples, students practiced writing statistical analysis plans, conducting analyses, assessing limitations and assumptions, and reporting results.
- Worked with faculty co-instructor to revise course curriculum including lectures, homeworks, data examples, and course project.
- Facilitated in-class discussions, gave lectures, and graded homeworks.

Regression Methods in the Health Sciences, University of Washington

Spring 2023

- Intermediate undergraduate course on regression methods, including linear regression, logistic regression, and Cox proportional hazards. Students used R programming language.
- Responsible for curriculum and all course materials, including lectures, quizzes, R labs, and data analysis project.
- Implemented a specifications-based grading system.

MENTOR

Statistics Directed Reading Program, University of Washington

Winter 2025 Topic: Target Trial Framework for Causal Inference

Winter and Fall 2023 Topic: Survival Analysis

Winter and Spring 2022 Topic: Optimal Treatment Rules

- One-on-one mentoring of undergraduates culminating in a final report and presentation.
- Created the concept and curriculum for each project.

TEACHING ASSISTANT

Statistical Inference for Biometry II, University of Washington

Winter 2024

- Held weekly office hours, refined solution keys, created rubrics for and graded homeworks and exams, and answered student questions via email and the course discussion board.

Categorical Data Analysis in Epidemiology, University of Washington

Fall 2024

- Created discussion section materials, ran discussion sections, held office hours, edited exams, and graded for a categorical data analysis course for graduate students in the health sciences.

Introduction to Survival Analysis, University of Washington Summer Institutes

Summer 2024

- Answered questions during lectures and via the course Slack for an online short course on survival analysis for professionals in public health and medicine.

Survival Data Analysis in Epidemiology, University of Washington

Winter 2023

- Created discussion section materials, ran discussion sections, held office hours, created rubrics, and graded for a categorical data analysis course for graduate students in the health sciences.

Biostatistics for the Health Sciences, University of Washington

Winter 2022, Winter 2020, Fall 2019

- Created discussion section materials, ran discussion sections, held office hours, and graded for an introductory undergraduate biostatistics course.

OTHER

Grader, Introduction to Data Science, Grinnell College

Spring 2018

- Created rubric and graded homework for an introductory undergraduate data science course.

Grader, Statistical Modeling, Grinnell College

Fall 2017

- Created rubric and graded homework for an intermediate undergraduate statistics course.

Course Mentor, Applied Statistics, Grinnell College

Fall 2015

- Provided guidance during in-class activities and held review sessions before exams for an introductory undergraduate statistics course.

HONORS AND AWARDS

University of Washington

National Science Foundation Graduate Research Fellowship, March 2021

Department of Biostatistics Merit Award, April 2019

ARCS Foundation Scholar, April 2019

Grinnell College

Grinnell College Linn Smith Prize in Mathematics, April 2018

Honors in Mathematics, May 2018

Phi Beta Kappa Member, April 2017

Goldwater Scholarship, March 2017

Grinnell College Pamela Ferguson Prize in Mathematics, February 2017

Phi Beta Kappa Beta Chapter of Iowa Sophomore Book Award, April 2016

PRESENTATIONS AND POSTERS

PRESENTATIONS

Inference for Optimal Treatment Rules under Stratum-wise Constraints for Discrete Rules

WNAR Annual Meeting, Fort Collins, CO, June 11, 2024

Joint Statistics Meetings, Toronto, ON, August 10, 2023

University of Washington Biostatistics Student Seminar, Seattle, WA, February 15, 2023

Variable Selection for Estimation of Interpretable Treatment Rules under Confounding

University of Washington Biostatistics Student Seminar, Seattle, WA, November 2, 2022

Can the potential benefit of individualizing treatment be assessed using trial summary statistics alone?

Joint Statistics Meetings, Washington DC, August 9, 2022

University of Washington Biostatistics Student Seminar, Seattle, WA, February 2, 2022

Efficient Communication in Distributed Machine Learning

Nebraska Conf. for Undergraduate Women in Mathematics, Lincoln, NE, January 27, 2018

Grinnell Mathematics and Statistics Student Seminars, Grinnell, IA, February 6, 2018

Machine Learning for the Classification of Toxicological Effects

Grinnell Mathematics and Statistics Student Seminars, Grinnell, IA, September 14, 2016

Joint Mathematics Meetings, Atlanta, GA, January 7, 2017

Machine Learning, Nash Equilibria, and Derangements: The Territorial Raider Game

Grinnell Mathematics and Statistics Student Seminars, Grinnell, IA, October 6, 2015

UNCG Regional Mathematics and Statistics Conference, Greensboro, NC, November 7, 2015

Joint Mathematics Meetings, Seattle, WA, January 8, 2016

Nebraska Conf. for Undergraduate Women in Mathematics, Lincoln, NE, January 31, 2016

POSTERS

Efficient Communication in Distributed Machine Learning

Joint Mathematics Meetings, San Diego, CA, January 12, 2018

The Territorial Raider Model with Strategic Movement and Multi-Group Interactions

Intl. Symposium on Biomath. and Ecology Edu. and Research, Normal, IL, October 9, 2015

Joint Mathematics Meetings, Seattle, WA, January 8, 2016

PROFESSIONAL SERVICE

University of Washington

Member, Biostatistics Curriculum Committee, September 2023 – June 2025

Member, Biostatistics Equity, Diversity, and Inclusion Committee, September 2019 – June 2025

Member, Biostatistics Activities and Events Squad, February 2019 – June 2025

Facilitator, Biostatistics Student Seminar, September 2022 – June 2024

Facilitator, Statistical Education Reading Group, January 2022 – June 2023

Co-leader, Statisticians and Biostatisticians of Underrepresented Genders, October 2020 – June 2023

Member, Admissions Committee, September 2022 – March 2023

Senator, Graduate and Professional Student Senate, September 2019 – June 2020; September 2021 – June 2022

Grinnell College

President, Mathematics Student Educational Policy Committee, August 2017 – May 2018

Member, Mathematics Student Educational Policy Committee, August 2016 – December 2016

Reviewer

Biometrics