Cora Allen-Savietta, PhD

Statistical Scientist at Berry Consultants cora@berryconsultants.com \Diamond coraallensavietta.github.io

EDUCATION

PhD, Statistics, minor in Biostatistics

University of Wisconsin-Madison

Madison, Wisconsin

Dissertation: Estimating Phylogenetic Networks from Concatenated Sequence Alignments

Advisor: Cécile Ané

BA, Psychology, graduated with high honors

Oberlin College Oberlin, Ohio

EXPERIENCE

2021 - present

Statistical Scientist

Berry Consultants, Austin, TX

- designing innovative clinical trials with adaptive sample sizes, complex primary endpoints, and flexible platform structures
- experience in statistical methods for a wide range of disease areas with recent projects in heart failure devices, prenatal nutrition, immune-modulating cancer treatments, and progression-modifying treatments for Parkinson's Disease
- experienced in guiding statistical discussions and supporting clinical teams through conversations with regulators

2016 - 2020

Graduate Research Assistant

University of Wisconsin, Department of Statistics

- Developed open-source Julia package to reconstruct species' evolutionary history with novel search strategies and efficient likelihood comparison
- Assessed breast cancer incidence and survival in a case-control study of over 26,000 women with generalized multivariate additive spatial models, covariate imputation, and variable width smoothing in R (with Professor Ron Gangnon)
- lead statistician in study of MD-PhD training program success (with Dr. Molly Carnes, paper in *Journal of Women's Health*)

2012 – 2015 Res

Research Assistant

Harvard University, Department of Pharmacoepidemiology

- Led a clinical trial testing the efficacy of an intervention for medication adherence. Supervised a team of five through patient recruitment and data analysis.
- Assisted in design, analysis, and publication of pharmaceutical post-marketing surveillance studies, leading to four papers in leading journals.

2010 - 2012

Undergraduate Research Assistant

Oberlin College, Departments of Psychology and Neuroscience

2010

Undergraduate Research Assistant

University of Wisconsin - Madison, Department of Psychology

PRESENTATIONS & INVITED SESSIONS

Allen-Savietta, C. ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop September 2025 (*invited*)

Allen-Savietta, C. Bridging the Gap between Bayesian and Frequentist Approaches in Clinical Trials for Drug Development. Summer Biometric Seminar, Medical University of Vienna June 2024 (*invited*)

Allen-Savietta, C. Forecasting with Confidence: Harnessing Predictive Probabilities in Adaptive Clinical Trial Design. Statisticians in the Pharmaceutical Industry PSI Conference June 2024 *(invited)*

Allen-Savietta, C. Forecasting with Confidence: Harnessing Predictive Probabilities in Practice. Society of Clinical Trials May 2024

Allen-Savietta, C. Path to Prevention in Parkinson's Disease: A Nested Platform Trial to Efficiently Identify Effective Treatments. Women in Statistics and Data Science October 2023

Crawford, A., Quintana, M. Zuckerman, B., Schoenfeld, D. Invited session "Innovation with Hierarchical Composite Endpoints in Complex Trial Design" at ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop September 2023 (*invited*, **served as chair**)

Crawford, A. & Allen-Savietta, C. Flexible Bayesian Models for Hierarchical Composite Analyses. International Society for Bayesian Analysis July 2022.

Allen-Coleman, C., Ané, Cécile M. Illuminate Evolutionary History with Phylogenetic Networks. Joint Statistical Meetings August 2019

Allen-Coleman, C., Ané, Cécile M. Estimating Evolutionary Rates Efficiently in Phylogenetic Networks. Great Lakes Bioinformatics Conference May 2019

Allen-Coleman, C., Gangnon, R.E. Simultaneous Clustering and Ranking of Small Area Health Outcomes Using Nonparametric Empirical Bayes Mixture Models. Contributed presentation at the International Conference on Health Policy Statistics January 2020

Allen-Coleman, C., Gangnon, R.E. Making Ranking Priorities More Explicit. Contributed presentation at Joint Statistical Meetings August 2018

Allen-Coleman, C., Trentham-Dietz, A., McElroy, J.A., Hampton, J.A., Newcomb, P.A., Gangnon, R.E. Geographic Location and Mortality after Breast Cancer Diagnosis. Society for Epidemiologic Research Meeting June 2018

PUBLICATIONS

Marion, J*, Lorenzi, E*, **Allen-Savietta, C***, Berry, S, Viele, K. Predictive Probabilities Made Simple: A Fast and Accurate Method for Clinical Trial Decision Making. Statistics in Medicine. 2025 June 3. DOI: https://doi.org/10.1002/sim.70120 *co-first authors

Overbey, J, Mentz, R, **Allen-Savietta**, C. Navigating Composite Endpoints: Methods and Recommendations for Trial Design and Interpretation. Journal of Cardiac Failure. Published online May 9, 2025. DOI: 10.1016/j.cardfail.2025.04.008

Heffron, A, Braun, KM, Allen-Savietta, C, Filut, A, Hanewall, C, Huttenlocher, A, Handelsman, J, Carnes, M. Gender Can Influence Student Experiences in MD-PhD Training. *Journal of Women's Health*. April 2020.

Fischer MA, **Allen-Coleman C**, Farrell SF, Schneeweiss S. Stakeholder assessment of comparative effectiveness research needs for Medicaid populations. *Journal of Comparative Effectiveness Research*. 2015 Sept 21.

Bateman BT, Huybrechts KF, Maeda A, Desai RJ, Patorno E, Seely EW, Ecker JL, **Allen-Coleman C**, Mogun H, Hernandez-Diaz S, Fischer MA. Calcium channel blocker exposure in late pregnancy and the risk of neonatal seizures: A cohort study. *Obstetrics and Gynecology*. 2015 Aug; 126(2): 271-8.

Bateman BT, Hernandez-Diaz S, Fischer MA, Seely EW, Ecker JL, Franklin JM, Desai RJ, **Allen-Coleman C**, Mogun H, Avorn J, Huybrechts KF. Statins and congenital malformations: a cohort study. *BMJ*. 2015 Mar 17;350:h1035.

Polinski JM, Kesselheim AS, Frolkis JP, Wescott P, **Allen-Coleman C**, Fischer MA. A matter of trust: Patient barriers to primary medication adherence. *Health Education Research*. 2014; 29: 755-63.

ACADEMIC AWARDS

2020	NIH Research Fellow Institute for Foundation of Data Science Department of Biostatistics, University of Wisconsin-Madison
2015 – 2019	NIH Data Science & Biostatistics Trainee Department of Biostatistics, University of Wisconsin-Madison
2012	Leah Freed Memorial Prize for Honors Thesis Research Department of Psychology, Oberlin College
2012	Jerome Davis Prize for Social Science Thesis Research Department of Sociology, Oberlin College

TEACHING & MENTORING

2018	Computational Tools for Data Analytics, Teaching Assistant Department of Statistics, University of Wisconsin-Madison
2015	Introduction to Biostatistics, Teaching Assistant Department of Biostatistics, University of Wisconsin-Madison
2015 – 2018	Undergraduate and Graduate Student Mentoring Department of Statistics, University of Wisconsin-Madison - mentored undergraduate Statistics students with honors thesis projects - weekly tutoring of undergraduate and graduate students in Statistics

PROFESSIONAL ORGANIZATIONS

American Statistical Association
Caucus for Women in Statistics
ASA Biopharmaceutical Section
International Society for Bayesian Analysis