

# Denise Bradford

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678-938-4242

## EDUCATION

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- **University of Nebraska-Lincoln** Lincoln, Nebraska  
*Doctor of Philosophy in Statistics* Aug. 2018 – Present
- **Purdue University** West Lafayette, Indiana  
*Master of Science in Applied Statistics* Jan. 2010 – May. 2012
- **Purdue University** West Lafayette, Indiana  
*Bachelor of Science in Applied Statistics* Aug. 2004 – Dec. 2008

## RESEARCH EXPERIENCE

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- **University of Nebraska - Lincoln** Lincoln, NE  
*Research Assistant* Aug 2018 - Present
  - **Smart Decision-Making in Small and Shrinking Rural Areas:** NSF Grant between Iowa State University and University of Nebraska - Lincoln: Performed web scraping techniques on open source data to be updated and stored on a local server for geospatial statistical analysis on proxy variables for the quality of life of residents.
  - **Nebraska Academy for Methodology, Analytics and Psychometrics:** Department of Children, Youth, Families and Schools: Performed data management and statistical analysis on research data related to the research on projects for K-12 development in Nebraska.
  - **Research Assistant for Dr. Kathy Hanford:** Department of Statistics: Performed generalized linear mixed-model analyses on research data related to the effect of diet on chicken eggs to lower needs of pesticides.
- **Purdue University** West Lafayette, IN  
*Research Assistant* Dec 2009 - May 2012
  - **Consultant:** Department of Statistics: Assisted members of Purdue's community with statistical design and analysis, and statistical software-related issues.
  - **Research Assistant for Dr. David Ertmer:** Department of Speech, Language and Hearing Sciences: Performed generalized linear mixed-model analyses on research data related to the speech development of infants and toddlers with cochlear implants.
  - **Research Assistant for R.W. Doerge:** Department of Statistics: Researched genomics of plant polyploidy and collaborated with scientists on various plant genome projects.

## INDUSTRY EXPERIENCE

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- **Hudl** Lincoln, NE  
*Data Analyst Intern* Jun 2019 - Present
  - **Decision Science Team:** Collaborated with colleagues and executed data modeling techniques to collect, analyze and interpret data for business partners. Worked on the development and implementation of new quantitative models in a new product. Identified and reported any data issues and proactively participated in team meetings with colleagues and managers. Deployed and managed high volume business partners data requests work flow to better service the overall company's data-driven decisions. Awarded intern award for listening to colleagues.
- **Freelance Statistical Consulting** Lincoln, NE  
*Biostatistics Consultant* Oct 2019 - Present
  - **Undisclosed:** Collaborated with Project Manager and Physicians to write statistical methods sections in protocols for early career medical students and residents. Worked on data management and statistical analysis methods, using logistic regression to assist in projects related to maternal health, spinal injuries and adolescent head trauma treatment.
- **Centers for Disease Control and Prevention** Atlanta, GA  
*Health Statistician* Jan 2016 - Aug 2018
  - **Division for Adolescent and School Health (DASH):** Managed and mentored ORISE fellow tasks and duties from day to day. Write, test, and implemented programs using SAS, SPSS, R, and Epi Info to clean, manage, merge, and analyze large, complex datasets. Perform power calculations and estimated sample size for Global School Health Surveys. Work with multiple, large datasets by formatting, merging, and subsetting them to meet the analysis goals. Make independent decisions about how to implement analysis most effectively and accurately and how to report results.
  - **Division for Population Health (DPH):** Served as program technical advisor developing methods and selecting techniques to conduct methodological research to improve sample surveys or experimental designs. Designed, developed, and applied mathematical techniques to statistical research related to methodology used in research, and evaluate the results. Provided advice and assisted for statistical projects or studies that are new or significant departures from the relationships established in previous problems, studies, or investigations, causing outcomes that are usually original in nature.
- **Northrop Grumman** Atlanta, GA  
*Health Analyst II* Jul 2012 - Feb 2016

- **Contractor for the Center for Disease Control and Prevention:** Assisted members of CDC Division of Behavioral Science's community with tasks related to the Behavioral Risk Factor Surveillance System (BRFSS) with results of statistical analyses, survey sampling, and process large amounts of population based survey data for statistical modeling and graphic analysis, identified relationships and trends in data, as well as any factors that could affect the results of research, prepared data for processing by organizing information, checking for any inaccuracies, and adjusting and weighting the raw data, evaluated the statistical methods and procedures used to obtain data to ensure validity, applicability, efficiency, and accuracy. Investigated and collaborated with SAS programmers, statisticians and epidemiologists on the use of data collected for health related interventions in the future of Reproductive Health. Developed sample design for the Federated States of Micronesia for conducting a door-to-door survey collection on the Island of Pohnpei for the 2015 collection year.

## PROGRAMMING SKILLS

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- **Languages:** SQL, SAS, SUDAAN, SPSS, R, LaTeX, Python
- **Technical Tools:** Looker, Git/Github, Salesforce Reporting

## TEACHING EXPERIENCE

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- **University of Nebraska - Lincoln** Lincoln, NE  
*Teaching Assistant* *Aug 2019 - May 2020*
  - **Lab Instructor for Graduate Course:** Department of Statistics: teaching basic statistical methods and statistical coding in two languages to 20 - 30 graduate students in a Design of Experiments Course.
  - **Assistant Instructor for Undergraduate Course:** Department of Statistics: assisting with an undergraduate course in a Calculus based Introduction to Statistics by performing office hours, grading quizzes and teaching a class in coding in R.
- **Emory University, Department of Biostatistics and Bioinformatics** Atlanta, GA  
*Lab Instructor* *Aug 2016 - May 2018*
  - **Statistical Methods I and Statistical Methods II:** Instructed a weekly two-hour lab course focused on using SAS for data analysis, modeling strategies and data management/ SAS programming for statistical methods to 45-50 public health graduate students.
- **Purdue University** West Lafayette, IN  
*Teaching Assistant* *Dec 2009 - May 2012*
  - **Lab Instructor for Undergraduate Course:** Department of Statistics: teaching Undergraduate students in classes related to Statistics in Society: An Introduction to Statistics, Introduction to Statistics and Elementary Statistical Methods

## PUBLICATIONS AND PAPERS

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- **Factors Associated with Pregnancy Among Incarcerated African American Adolescent Girls - 2016:** Journal of Urban Health— Simone C. Gray, Ph.D.; Kristin Holmes; Denise R. Bradford
- **Environmental Regulation of Heterosis in the Allopolyploid Arabidopsis Suecica - 2016 :** Plant Physiology Today— Erik M. Solhaug, Jacie Ihinger, Maria Jost, Veronica Gamboa, Blaine Marchant, Denise R. Bradford, R.W. Doerge, Anand Tyagi, Amy Replogle and Andreas Madlung
- **A Re-raking Tool for Behavioral Risk Factor Surveillance System (BRFSS) County and County Group-Level Estimation - 2015:** Preventing Chronic Disease in the Tools and Techniques— Burton Levine, Jamie Newnan, Diane Catellier, Todd Rogers, Caitlin Hennessy, Paul Siegel and Denise R. Bradford
- **Consonant Production Accuracy in Young Cochlear Implant Recipients: Developmental Sound Classes and Word Position Effects - 2012:** American Journal of Speech- Language Pathology— David J. Ertmer, Diana True Kloiber, Jongmin Jung and Denise R. Bradford

## PRESENTATIONS

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- **Annual Conference of Women in Statistics – Cary, NC — 2014:** “Latent Variable Estimation in Self-Reported Number of days of Poor Physical and Mental Health” Presenters: Denise Bradford, Carol Pierannunzi, and Derek Ford
- **Annual Conference of American Association for Public Opinion Research – Boston, MA — 2013:** “Finding the Optimal Allocation of Sample Sizes in Dual Frame RDD Telephone Surveys” Presenters: Haci Ackin and Denise Bradford
- **Annual Joint Statistical Meetings – Montreal, Canada — 2013:** “Cellular RDD Sampling Enhancements for the Behavioral Risk Factor Surveillance System” Presenters: G. Machell Town, Ashley Hyon, Denise Bradford, Carol Pierannunzi, and Carol Gotway Crawford

## PROFESSIONAL MEMBERSHIPS

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- **Communications Chair for Statistics in Sports Section:** American Statistical Association