

Justin Williams

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EDUCATION

University of California, Los Angeles (UCLA)

Ph.D. – Biostatistics

Graduate Summer Research Mentorship Recipient

M.S. - Biostatistics

Expected 2020

Summer 2017

Received 2016

Boston College

B.A. – Mathematics

2013

RESEARCH EXPERIENCE

Graduate Student Researcher

2015 - Present

Connie Kasari Lab

- Constructed Bayesian multi-level hierarchical model incorporating spatial random effects
- Assembled data visualization materials with descriptive and time trends
- Modeled longitudinal treatment effects with mixed effects and generalized estimating equations
- Automated reliability analysis with novel functions
- Data management and data cleaning for multisite clinical trial database

Biostatistics R&D Intern

Summer 2018

Alcon

- Developed novel methodology for parameter estimation of truncated censored data
- Authored two internal technical documents
- Investigated methods for estimation with left censoring using R and SAS
- Produced functions and macros to simulate data and calculate bias metrics
- Applied methods to estimate parameters for historical clinical trial data

Predictive Analytics Intern-Business Intelligence Team

Summer 2016

Ingram Micro

- Illustrated regional product demand for products to inform warehouse stocking decisions
- Pulled purchasing and warehouse transaction information from servers via SQL
- Engineered product similarity scores based on feature list with mixed scale variables

TEACHING EXPERIENCE

Special Reader: Computer Management of Health Data

Sep '16 – Dec '16

UCLA, Biostatistics Department

Student Evaluation: 9/9

- Taught data management tools with SAS to 23 first-year Biostatistics graduate students
- Introduced tools for creating randomization schemes and generating reproducible data

Special Reader: Basic Biostatistics

Jan '16 – Mar '16

UCLA, Biostatistics Department

Student Evaluation: 8.89/9

- Led weekly lab sections using Stata on topics such as linear regressions, ANOVA, logistic regression, and non-parametric tests
- Designed and administered discussion sections weekly
- Graded homework and lab assignments

SOFTWARE SKILLS

R (coursework/teaching/research/preferred)

Stata (coursework/teaching)

Julia (coursework)

SQL (work experience)

SAS (internship/coursework/teaching/work)

Python (research)

RESEARCH INTERESTS

-Causal Inference
-Bayesian Analysis

-Longitudinal Analysis
-Spatial Modeling

-Machine Learning

PUBLICATIONS

Academic Journals

- (1) Locke, J., Williams, J., Shih, W., & Kasari, C. (2017). "Characteristics of socially successful elementary school-aged children with autism", *Journal of Child Psychology and Psychiatry* **58**(1), 94-102.
- (2) Gulsrud, A., Carr, T., Williams, J., Panganiban, J., Jones, F., Kimbrough, J., Shih, W., & Kasari, C. (In Revision). "Developmental screening and early intervention in a childcare setting for young children at-risk for autism and other developmental delays: A feasibility trial", *Autism Research*.
- (3) Dean, M., Williams, J., Kasari, C., & Orlich, O. (In Revision). "Adolescents with autism spectrum disorder and social skills groups at school: A randomized trial comparing intervention environment and peer composition", *School Psychology Review*.
- (4) Williams, J., Kim, H., & Crespi, C. (In Review). "Maximum Likelihood Estimation of a Truncated Normal Distribution with Censored Data", *Statistics in Medicine*.

Internal Documents

- (1) Williams, J. & Kim, H. (2018) "Analysis methods for left censored log contrast sensitivity data", Alcon Technical Document (TDOC-0055661).
 - (2) Williams, J. & Kim, H. (2018) "Methods for calculating log contrast sensitivity difference with left censoring", Alcon Technical Document (TDOC-0055664).
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PRESENTATIONS & CONFERENCES

"Propensity Score Methods for Studies with
Clustered Data and Continuous Exposure"
2018 Joint Statistical Meetings

Vancouver, BC, Canada
July, 2018

"Using Clustering to Define ASD Subgroups with
Differential Play Outcomes"
2018 Gatlinburg Conference

San Diego, CA
April, 2018