

Date Prepared: 01/28/2021

Briana Stephenson

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EDUCATION:

2007	Mathematics	BS	Massachusetts Institute of Technology (MIT)
2010	Biostatistics	MPH	The George Washington University (GWU)
2017	Biostatistics	PHD	The University of North Carolina at Chapel Hill (UNC)

POSTDOCTORAL TRAINING:

2017-2019	Hispanic Community Health Study/ Study of Latinos (<i>Biostatistics</i>)	UNC Collaborative Studies Coordinating Center
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ACADEMIC APPOINTMENTS:

2019-	Assistant Professor of Biostatistics	Harvard T.H. Chan School of Public Health (HSPH)
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OTHER PROFESSIONAL APPOINTMENTS

2008-2010	Mathematical Statistician	US Food & Drug Administration
2010-2011	Senior Statistician (ORISE Fellow)	U.S. Department of Defense

HONORS AND DISTINCTIONS:

2018	Distinguished Student Paper Award	ENAR	For Stephenson, Herring et al., JASA 2019
2017	Gillings Dissertation Award	UNC-Chapel Hill	For Public Health Impact
2015	Junior Researcher Poster Award	10 th Conference on Bayesian Nonparametrics	Best poster in Applied Stat
2012	Public Health Award	UNC-Chapel Hill	Biostatistics
2011	Smith Anderson Fellowship	UNC-Chapel Hill	Biostatistics
2009	Tauber Scholarship	GWU	
2008	Departmental Scholarship	GWU	Epidemiology & Biostatistics

PROFESSIONAL SERVICE:*Professional Societies:*

2021-2023	Council of Sections Rep	ASA Biometrics Section
2018-	Member	ASA, Caucus for Women in Statistics
2014-	Member	American Statistical Association
2020-2022	Regional Advisory Board	International Biometric Society
2013-	Member	Eastern North American Region
2020	Program Committee	Academic Data Science Alliance Annual Meeting
2018	Program Committee	2018 BNP@NIPS
2014-	Member	International Society of Bayesian Analysis (ISBA)

GRANT REVIEW ACTIVITIES:

2019	DMS/NIGMS Panel B	NSF/NIH
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EDITORIAL ROLES:*Ad hoc reviewer*

- BMJ Open
- Journal of the American Statistical Association

- Statistics in Medicine

DEPARTMENTAL/SCHOOL AND UNIVERSITY SERVICE:

Harvard University Service

2020- Ivy+ Consortium COVID Data Sharing Research team

School Service

2019- Faculty Council HSPH

Departmental Service

2020- Faculty Mentor, Harvard Summer program in Biostatistics & Computational Biology HSPH
 2019- PhD Admissions Committee, Member HSPH/Biostatistics
 2019- Diversity Pipelines committee, Member HSPH/Biostatistics
 2019- Computational Biology & Quantitative Genetics (CBQG) Masters Program, Executive Committee Member HSPH

UNC Biostatistics Service

2016-2017 DataFest, Graduate Duke University
 VIP Consultant
 2016 Summer Undergraduate Pipeline Symposium, Poster Judge UNC-Chapel Hill
 2015-2016 Faculty Hiring Committee, Member UNC-CH/BIOS
 2013-2014 Faculty Hiring Committee, Member UNC-CH/BIOS

PUBLICATIONS:

1. **Stephenson B**, Herring A, Olshan A. Supervised Robust Profile Clustering. arXiv preprint. arXiv:2007.04509. 2020 Jul 9.
2. **Stephenson BJK**, Sotres-Alvarez D, Siega-Riz AM, et al. Empirically Derived Dietary Patterns Using Robust Profile Clustering in the Hispanic Community Health Study/Study of Latinos. *J Nutr.* 2020 Oct 12; 150(10): 2825-2834
3. **Stephenson B**, Herring A, Olshan A. Robust Clustering with Subpopulation-specific Deviations. *Journal of the American Statistical Association* 2020; 115(530): 521-537
4. Phillips MR, Khoury AL, **Stephenson BJ**, Edwards LJ, Charles AG, McLean SE. Outcomes of Pediatric Patients with Abdominal Sepsis Requiring Surgery and Extracorporeal Membrane Oxygenation Using the Extracorporeal Life Support Organization Database. *The American Surgeon.* 2015 Mar; 81 (3) 245-251

5. Weiss J, **Stephenson BJ**, Edwards LJ, Rigney M, Copeland A. Public Attitudes About Lung Cancer: Stigma, Support, and Predictors of Support. *Journal of Multidisciplinary Healthcare*. 2014 Jul; 7:293-300.
6. Keating K, Walko C, **Stephenson B**, ONeil BH, Weiss J. Incidence of Cetuximab-related Infusion Reactions in Oncology Patients Treated at the University of North Carolina Cancer Hospital. *Journal of Oncology Pharmacy Practice*. 2014 Dec; 20(6): 409-416.
7. Veeramachaneni NK, Feins RH, **Stephenson BJ**, Edwards LJ, Fernandez FG. Management of Stage IIIA Non-small Cell Lung Cancer by Thoracic Surgeons in North America. *The Annals of Thoracic Surgery*. 2012 Sep; 94(3): 922-926.
8. **Stephenson BJK**. Robust clustering methods with subpopulation-specific deviations [dissertation]. Chapel Hill (NC): The University of North Carolina at Chapel Hill; 2017. 139 p.

Manuscripts under preparation

1. Maduekwe MN*, **Stephenson BJK***, Yeh JJ, Troester M, Sanoff HK. Cluster identification of early stage pancreatic adenocarcinoma patients at greatest risk for disparities of care. *Prepared for Journal of National Cancer Institute*.
2. Li D, Gaynor SM, Quick C, Chen JT, **Stephenson BJK**, Coull BA, Lin X. Identifying US counties with high cumulative COVID-19 burden and their characteristics. *Prepared for PNAS*.
3. **Stephenson BJK***, DeVito R*, Edefonti V, Siega-Riz AM, Sotres-Alvarez D, Cai J. Dietary patterns derived using Bayesian Multi-Study Factor Analysis: Results from Hispanic Community Health Study/Study of Latinos. *Prepared for American Journal of Clinical Nutrition*.
4. **Stephenson BJK**, Sotres-Alvarez D, Siega-Riz AM, Herring A, Cai J. Effect of dietary patterns on cardiometabolic health using Bayesian nonparametric techniques: results from Hispanic Community Health Study/Study of Latinos. *Prepared for American Journal of Epidemiology*.

FUNDED GRANTS AND UNFUNDED PROJECTS:

ACTIVE GRANTS:

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| 2021-2022 | Harvard Data Science Initiative, Bias ² Award
<i>Identifying bias in receipt and access to optimal care for endometrial cancer patients in Massachusetts</i>
Principal Investigator |
| 2020-2021 | NHLBI PRIDE CVD-CGE, Small Research Project
<i>Statistical methods to understand dietary exposure patterns among understudied populations</i>
Mentored Independent Researcher |

PENDING GRANTS:

- 2021-2026 Statistical methods to understand temporal dietary exposure patterns and CVD risk among understudied populations
NHLBI/K01
Principal Investigator
Develop new methodology to identify dietary patterns related to CVD risk of small understudied groups under a repeated measures study design.
- 2021-2022 Changes in beverage availability and targeted marketing associated with Philadelphia beverage tax
Healthy Eating Research 2020: Special Solicitation on Beverage Consumption in Early Childhood
Co-Investigator
- 2021-2022 Identifying bias in receipt and access to optimal care for endometrial cancer patients in Massachusetts
Harvard Data Science Initiative Bias² program
Principal Investigator

COMPLETED GRANTS:

- 2017-2019 Hispanic Community Health Study/Study of Latinos
NHLBI Postdoc Diversity Supplement: HHSN268201300001I
Postdoctoral research fellow
Develop and utilize Bayesian nonparametric clustering methods to describe dietary behaviors and its association to cardiovascular risk in HCHS/SOL study population
- 2014-2017 National Birth Defects Prevention Study
T32 Training Grant: T32ES007018
Predoctoral Research Trainee
Develop Bayesian clustering methodology to derive dietary patterns of pregnant mothers in the United States and determine risk to orofacial birth defects

INVITED PRESENTATIONS:*Statistical Meetings*

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| 11/2020 | Dietary patterns using Bayesian Multi-study Factor Analysis | HCHS-SOL Statistics Interest Group/Virtual |
| 11/2020 | Dietary patterns using Bayesian Multi-study Factor | HCHS-SOL Diet Scientific |

	Analysis	Interest Group/Virtual
8/2020	Clustering Methods to Empirically Derive Dietary Patterns in the United States <i>Topic-contributed session</i>	JSM/Virtual (COVID-19)
9/2019	StatFest 2019: Opportunities in Statistics/Data Science (Government & Academia), <i>Panelist</i>	UTHSC/Houston, TX
8/2019	Diversity Workshop & Mentoring Program: Success in Graduate school, <i>Panelist</i>	JSM/Denver, CO
8/2018	Supervised Robust Profile Clustering	JSM/Vancouver, CA
6/2018	Joint Model-based clustering of Multivariate Grouped Data: Dietary effects on Cardiometabolic Markers in the Hispanic Community Health Study/ Study of Latinos	ISBA World Meeting/ Edinburgh, Scotland
3/2018	Robust Profile Clustering with Subpopulation-specific Deviations	ENAR Spring Meeting/ Atlanta, GA
3/2018	Identifying Dietary Patterns in a Diverse Population: a Bayesian Nonparametric Solution Regional Meeting/	Women in Data Science Washington, DC
6/2017	Robust Clustering with Subpopulation-specific Deviations	11 th Conf. on Bayesian Nonparametrics/ Paris, France
3/2017	Robust Model-based Clustering from Multivariate and Grouped Data via Local Deviation Processes	ENAR Spring Meeting/ Washington, DC
3/2015	ENAR Diversity Workshop: Graduate Experiences In (Bio)statistics, <i>Panelist</i>	ENAR Spring Meeting/ Miami. FL
<i>Department Seminars</i>		
4/2020	Amherst College Statistics Symposium <i>Seminar speaker</i> *postponed due to COVID19*	Amherst/Amherst, MA
4/2020	Harvard Applied Statistics Workshop <i>Seminar speaker</i>	Harvard/Cambridge, MA
4/2020	George Washington University Biostatistics Center <i>Seminar speaker</i> *postponed due to COVID19*	GWU/Washington, DC

1/2019	Robust Model-based Clustering for Heterogeneous populations	Emory University/Atlanta
1/2019	Robust Model-based Clustering for Heterogeneous populations	U of Washington/Seattle
1/2019	Robust Model-based Clustering for Heterogeneous populations	Fred Hutchinson Cancer Research Center/Seattle
1/2019	Robust Model-based Clustering for Heterogeneous populations	Harvard University/Boston
12/2018	Robust Model-based Clustering for Heterogeneous populations	UPenn/Philadelphia
11/2018	Robust Model-based Clustering for Heterogeneous populations	URI/Kingston, RI
4/2018	Robust Profile Clustering with Subpopulation-specific Deviations	Johns Hopkins University/Baltimore, MD
11/2015	The Trouble with Dietary Pattern Analysis in the United States: A Bayesian Nonparametric Solution	ENVR/UNC Chapel-Hill
4/2010	Phasing out the Biologics AIDS Program Assistant Codes (PAC): A Statistical Model	FDA Biologics Field Committee Mtg/Rockville

TEACHING AND TRAINING:

ADVISORY AND SUPERVISORY RESPONSIBILITIES:

Doctor of Philosophy

2020-	Gopal Kotecha, Dissertation committee, Member Current position: Passed qualifying exam/Third year PhD Biostatistics
2019-	Kelsey Vercammen, Dissertation committee, Member <i>Examining drivers and points of intervention for adiposity and cardiovascular disease risk in the United States</i> Current position: Passed oral exam/Fourth year PhD Epidemiology
2019-	Onisha Etkins, Dissertation committee, Member <i>Using intersectionality theory to examine mental health in disadvantaged communities</i> Current position: Passed oral exam/Fourth year PhD Population Health Sciences

Master of Science

2020-2021	Jeanette Varela, SM80 Biostatistics, Independent study
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Nutrient Intake Patterns and its Association to Cardiovascular Disease Risk Factors in US Hispanic/Latino populations: Results from HCHS/SOL and NHANES

2019-2020 Anna Booman, CBQG Thesis committee, Member

TEACHING COURSES AT HSPH:

2020 BST 228/Applied Bayesian Analysis Primary Instructor

TEACHING COURSES AT OTHER INSTITUTIONS:

2019	BIOS 600/Principles of Statistical Inference UNC Chapel Hill	Instructor
2018	BIOS 600/Principles of Statistical Inference UNC Chapel Hill	Instructor
2015	BIOS 600/Principles of Statistical Inference UNC Chapel Hill	Teaching Assistant
2014	BIOS 600/Principles of Statistical Inference UNC Chapel Hill	Instructor
2013	BIOS 600/Principles of Statistical Inference UNC Chapel Hill	Teaching Assistant
2010	PUBH 202/Biostatistical Applications for Public Health The George Washington University	Small Group Lecturer

COMMUNITY SERVICE ACTIVITIES:

2012-	High school female empowerment	Delta Sigma Theta Sorority GEMS
2013-2015	Student Mentoring program	UNC Biostatistics Students Association
2003-2006	Big Sister program	Big Brother/Big Sisters of America