## EDUCATION

1. Ph.D. in Statistics,

 University of Kentucky

 Dissertation: *Khatri-Rao products and conditions for the uniqueness of PARAFAC solutions for IxJxK arrays*, Directed by William S Rayens

2001 M.S. in Statistics

 University of Kentucky

1999 B.S. in Mathematics

 Mount Vernon Nazarene University

 Summa Cum Laude

 Valedictorian

**PROFESSIONAL EXPERIENCE**

07/18-present Professor and Chair (Interim 08/17 – 06/18)

 Department of Biostatistics

 College of Public Health

 University of Kentucky

07/15-present Kate Spade & Company Endowed Professorship

 Center for Research on Violence Against Women

07/13-06/18 Associate Professor

 Department of Biostatistics

 College of Public Health

 University of Kentucky

07/11-present Co-Director

 Biostatistics, Epidemiology, and Research Design Faculty

 Center for Clinical and Translational Science

 University of Kentucky

07/11 – 08/16 Co-Director (Associate Director 07/11 – 07/13)

 Applied Statistics Lab

 University of Kentucky

08/06-06/13 Assistant Professor

 Department of Biostatistics

 College of Public Health

 University of Kentucky

03/04-08/06 Sr.Statistician (*Contractor from 03/04-07/05; Consultant 08/01/07-present)*

REGISTRAT, Inc.

 Lexington, Kentucky

08/02-06/05 *Research Assistant*

University of Kentucky, School of Public Health

08/99-08/02 *Teaching Assistant (Instruction 06/00 – 08/02)*

 University of Kentucky, Department of Statistics

**TEACHING**

BST330 Statistical Thinking for Population Health (Fall 2013, Spring 2014)

Undergraduate course providing a conceptual introduction to statistical topics commonly encountered in public health studies. This course meets UKCore SIR requirements.

CPH 330 Health Analytics I (CPH 365 Fall 2015, Spring 2016, Fall 2016; CPH330 Fall 2017, Spring 2018)

This undergraduate course for BPH majors focuses on applying methods for solving public health analytical problems. This course will build on the statistical principles and scientific reasoning introduced in introductory statistics courses, but will focus on the application of methods for categorical data analysis. Topics include data visualization, exploratory data analysis, summary statistics, statistical testing, estimation, confounding, and the use of regression models commonly encountered in public health. An emphasis on data analytic methods will also introduce students to the use of statistical software*.*

CPH603 Biostatistics Concepts and Applications in Public Health (Spring 2013/2014/2015)

Covers topics relating to applications of biostatistics in public health. It provides a conceptual introduction to statistical methods commonly used in public health practice.

BST693 (STA692) Biostatistical (Statistical) Consulting (Fall 2011, Spring/Summer/Fall 2012, Spring/Fall 2013, Fall 2014, Fall 2015 and Spring 2014-2016 as CPH608)

 Graduate course covering issues that arise in biostatistical and statistical consulting, including

how to ask good questions in a consulting session, how to become better problem solvers, and how to express results both orally and in writing.

BST 762/STA632 Longitudinal Data Analysis (Spring 2011, Spring 2012)

Graduate course covering methods for longitudinal data analysis. Includes linear and generalized linear mixed models, generalized estimating equations, and nonlinear mixed models as they apply to problems in clinical trials and public health.

CPH 930 Advanced Biostatistics Methods in Public Health (Spring 2009, 2010, 2013. 2014).

DrPH course covering linear regression, logistic regression, proportional-hazards regression and other topics in statistical methods relevant to students in public health.

CPH 630/STA 681 Biostatistics II (Fall 2006; Spring/Fall 2007; Spring/Fall 2008, Spring/Fall 2010, Fall 2011, Fall 2012).

Introductory graduate course covering linear regression, logistic regression, proportional-hazards regression and other topics in statistical methods relevant to students in public health and clinical research.

CPH 664 Design and Analysis of Clinical Trials (Fall 2006 with Dr. Kryscio; Fall 2010).

Introductory graduate course in the fundamental concepts used in the design and analysis of Phase I-III clinical trials.

CPH 632 Mixed Models in Public Health (Fall 2007)

Introductory graduate course in the statistical techniques for analyzing studies in public health that involve repeated measures and random effects.

STA200 Statistics: A Force in Human Judgment (Summer 2000 – Summer 2002)

Introductory undergraduate course in the concepts of sampling variability, inference, experimental design, displaying and interpreting data.

# SERVICE

# Teaching Statistics in the Health Sciences Section, American Statistical Association

Past-Chair (2016), Chair (2015), Chair-Elect (2014)

Faculty Affiliate, Kentucky Injury and Prevention Research Center, University of Kentucky

Faculty Affiliate, Center on Trauma and Children, University of Kentucky

# Reviewer for Rehabilitation Research and Development (RR&D) Small Projects in Rehabilitation Veterans Affairs, Arlington, VA. February 28, 2020

# Reviewer for Rehabilitation Research and Development (RR&D) Small Projects in Rehabilitation Veterans Affairs, Arlington, VA. August 6, 2019

# Reviewer for Rehabilitation Research and Development (RR&D) Small Projects in Rehabilitation Veterans Affairs, Arlington, VA. February 28, 2019

# Reviewer for Rehabilitation Research and Development (RR&D) Small Projects in Rehabilitation Veterans Affairs, Arlington, VA. August 7, 2018

# Research (SPiRE), Mental Health & Social Reintegration panel member, Veterans Affairs

# Reviewer for Psychological Health and Social Reintegration Merit Review, Veterans Affairs, Arlington, VA. February 26, 2015

# Reviewer for Rehabilitation Research and Development (RR&D) Service Merit Review, Veterans Affairs, Arlington, VA. August 14-15, 2012

# Reviewer for Rehabilitation Research and Development (RR&D) Service Merit Review, Veterans Affairs, Arlington, VA. March 13-14, 2012

Statistical Consultant, Christopher and Dana Reeve Foundation (05/17 – present)

DSMB member, Christopher Cox (PI), Duke University

DSMB member, Benjamin Miller (PI), NIA (2019 – present)

DSMB member, Innovative Diagnostics

Scientific Steering Committee, Centocor (10/07 – 01/09)

Journal reviewer for

*Journal of Athletic Training* (Editorial Board 2014-present)

*Journal of Sport Rehabilitation* (Editorial Board 2009-present)

*Clinical Nephrology* (Editorial Board 2008-2009)

*Violence Against Women*

*Psychology of Violence*

*Sex Roles*

*Journal of Statistics Education*

*Special Care in Dentistry*

*Pediatric Dentistry*

*Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology and Endodontology (Triple O)*

*Psychometrika*

University Service

University of Kentucky, University Appeals Board (09/14 – 06/2017)

University of Kentucky, University Sexual Misconduct Appeals Board (11/15 – present)

University of Kentucky, HCCC, Alternate member (07/13 – 07/15)

KY Women’s Health Registry (07/07 – present; PI 2013-2017); Women’s Health & You PI (2017 – present)

University of Kentucky Interim General Education Oversight Committee/ UKCEC (01/2011 – 06/2014)

University of Kentucky CCTS Scientific Review Committee (08/08 – 07/11)

University of Kentucky Provost’s Teaching Award Selection Committee (2010)

University of Kentucky TA Orientation: Microteach Leader (08/09)

University of Kentucky CPH Strategic Planning Committee, Chair (2016- present)

University of Kentucky CPH Dean Search Committee (Spring 2015)

University of Kentucky CPH PhD Admissions Committee (08/14-07/16)

University of Kentucky CPH Academic Affairs Committee (08/08 – 08/11)

University of Kentucky CPH DrPH Course Director (08/08 – 08/10)

University of Kentucky CPH Student Affairs and Admissions Committee (08/06 – 08/08)

University of Kentucky CPH Biostatistics DrPH Core Principles Exam Committee (01/07 – 06/08)

University of Kentucky CPH Biostatistics, Graduate Certificate in Biostatistics, Developer (Fall 2014-Spring 2015) and Director (Spring 2015)

University of Kentucky, Graduate Committees: 102

MPH: 50

MS: 22

PhD: 30

University of Kentucky, CPH, DrPH Committees: 8

**HONORS AND AWARDS**

University Research Professor, University of Kentucky (2018)

Nominee for Sarah Bennett Holmes Award, University of Kentucky (2017)

Dean’s Outstanding Teaching Performance Award, College of Public Health (2014)

Delta Omega Public Health Honor Society, Beta Gamma Chapter (2012)

Teaching Statistics in the Health Sciences section Contributed Paper Award (JSM 2012)

Provost’s Outstanding Teaching Award, University of Kentucky (2009)

Golden Apple Award for Outstanding Teaching, College of Public Health (2008)

Nominee for ASPH Pfizer Early Career Teaching Award (2008)

R.L. Anderson Award for Outstanding Teaching, UK Department of Statistics (2001)

**DOCTORAL ADVISING**

Advisor for Hsin-Fang (Grace) Li, Winner of the Charlie Sampson Student Poster competition

*Data mining and pattern discovery using exploratory and visualization methods for large multidimensional datasets (2013)*

Advisor for Kristen McQuerry (2016)

*Statistical Methods for Handling Intentional Inaccurate Responders (2016)*

Advisor for Catherine Starnes (2016)

*Evaluating a bystander intervention program on reproductive coercion: using quasi-experimental design strategies to address methodologic issues in randomized community prevention trials*

Co-Advisor for Meng Liu (2017)

*A Predictive Probability Interim Design for Phase II Clinical Trials with Continuous Endpoints*

Advisor for Joshua Lambert (2017)

*An Exploratory Statistical Method For Finding Interactions In A Large Dataset With An Application Toward Periodontal Diseases*

**FUNDING (ACTIVE)**

UG1 DA 050069 (Staton) 09/01/2019-08/31/2024

NIH/NIDA

Kentucky Women's Justice Community Opioid Innovation Network (WJCOIN)

The overall goal of the W-JCOIN is to increase initiation and maintenance of MOUD among high-risk justice-involved women in the transition from jail to the community to reduce opioid relapse and overdose.

P42 ES007380 (Pennell) 04/07/1997-03/31/2020

NIH/NIEHS

Nutrition and Superfund Chemical Toxicity

The University of Kentucky Superfund Research Center (UK-SRC) proposes to address a pervasive central research problem: the persistence of halogenated organics at Superfund sites and elsewhere.

UM1DA049406 (Walsh) 04/01/2019-03/31/2023

NIDA

HEALing Communities in Kentucky

HEALing (Helping End Addiction Long-term) Communities in Kentucky is a large-scale, multi-site, community intervention project submitted to “test the immediate impact of implementing an integrated set of evidence-based interventions” with the aim of reducing opioid overdose deaths by 40% in three years. Primary intervention aims are to improve and expand treatment with medications for opioid use disorder (MOUD) by increasing capacity, entry and retention, expand overdose prevention approaches in the community and reduce opioid supply by decreasing high risk prescribing and increasing safe drug disposal. Community partners include those representing behavioral health, healthcare, public health, criminal justice and community coalitions.

UL1 TR001998 (Kern)     08/15/2016-05/31/2020

NCATS

Kentucky Center for Clinical and Translational Science

The Kentucky Center for Clinical and Translational Science provides infrastructure, services, and programs to support clinical and translational investigators, and to foster collaborations that facilitate research translation and team science.

Role: Co-I, Co-Director of Biostatistics, Epidemiology, and Research Design (BERD) Core

U01CE002668 (Coker & **Bush**) 09/30/2015 – 09/29/2020

CDC

Bystander Program Adoption & Efficacy to Reduce SV-IPV in College Community

Because the 2013 Campus Sexual Violence Elimination Act1 (SaVE) now requires bystander training for all publicly funded colleges and universities (hereafter colleges), a “natural experiment” presents itself as the opportunity to determine relative bystander training efficacy across multiple colleges. This research seeks to determine the promise of bystander interventions for college communities as mandated by SaVE and provide capacity to grow and support VAW researchers into the future.

Role: MPI

**FUNDING (COMPLETED)**

R01CE002690 (**Bush** & Coker) 9/01/15 – 8/31/19

CDC

Randomized Trial Integrating Substance Abuse With Bystander-Based Violence Prevention

This randomized intervention trial will determine which bystander-based programmatic elements are most efficacious in changing risk behaviors which may lead to violence and/or alcohol abuse. This trial will provide strategic information needed by public colleges to effectively meet the mandate to implement effective bystander interventions.

Role: MPI

P30 GM110788 (Kyrkanides) 08/15/14-07/31/19

NIGMS

Center for Biologic Basis of Oral/Systematic Diseases (Phase III)

The goal of this study is to investigate the contribution of chronic inflammation to oral and systemic disease. The CBBO/SD provides an infrastructure for development of the junior faculty by providing grants management support, educational opportunities, a biostatistics/bloinformatics core, and a clinical research center.

Role: Co-I

R01HD075783 (Follingstad) 07/01/13-12/31/19

National Institute Child Health Human Development

Life’s Snapshot (Follow the Green Dot)

The purpose of this R01 is to evaluate the longer-term impact of Green Dot Across the Bluegrass, an active bystanding-based randomized intervention trial in 26 high school across Kentucky designed to reduce sexual and partner violence (5U01CE001675) in a cohort of seniors as they transition into young adulthood

Role: Co-I

2016-69001-24915 (Gustafson)

National Institute of Food and Agriculture 2/15/16 - 2/14/19

Smart Shopping - Adolescent Intervention to Improve Food Shopping Practices Where You Live and Learn

The objective of this project is to develop and test the effectiveness of a Cooperative Extension enhanced intervention titled "Smart Shopping," aimed at improving the shopping practices of adolescents with the ultimate goal of increasing fruit and vegetable intake. To achieve this goal, we will conduct formative research via a community-wide analysis of the school, home and neighborhood food environments. In collaboration with Extension staff and faculty, this formative research will to provide insight into the development and enhancement of the “Smart Shopping” and will allow for implementing a randomized controlled intervention trial to examine the effectiveness of an intervention to improve adolescents’ purchasing and consumption behaviors.

Role: Co-I

R01AG046116 (Segerstrom) 07/01/13 – 06/30/18

National Institute on Aging

Pain and Well-being in Older Women: The Roles of Activity and Motivation

The present study tests a model in which qualities of the goal-directed and physical activities of older women determine whether and how pain affects EWB. When activity is externally motivated by guilt or control, pain will inhibit activity and activity will adversely affect EWB; when activity is autonomously motivated by interest or self-definition, pain will not inhibit activity and activity will enhance EWB.

Role: Co-I

No-ID (Smith) 01/01/16-01/01/18

American Board of Psychiatry and Neurology Incorporated

Unannounced simulation to evaluate communication and interpersonal skills among neurology residents

The teaching and evaluation of behaviorally-mediated competencies such as communication and interpersonal skills remains challenging due to the lack of a standardized and effective approach, in addition to uncertainty regarding the role of assessment bias. In this proposal, I aim to utilize unannounced simulation as a means to optimize the validity and relevance of assessment.

Role: Co-I

P003994501 (Pfeifle) 02/01/14 – 01/31/17

University of Minnesota

Coordinating Center for Interprofessional Practice and Education

Interprofessional Teams on the Stroke Care Unit will use rapid cycle testing of enhanced communication, problem solving, and planning care with patients to accelerate the transition of care for patients.

Role: Co-I

R21DE024804 (Gonzalez) 12/01/14 – 11/30/16

National Institute of Dental Research

Antimicrobial and Inflammatory Epithelial Responses Modulated by P. Gingivalis-Induced PLA2-IIA

We expect to show that more focused control of dysbiosis process should ultimately provide new opportunities for the development of innovative approaches to prevent/treat periodontitis.

Role: Co-I

R01AG046920-01A1 (Peterson) 9/01/14 – 5/31/19

National Institute on Aging

Novel Actions of Metformin to Augment Resistance Training Adaptations in Older Adults

To determine if metformin treatment augments skeletal muscle size and strength gains in conjunction with PRT in older adults.

Role: Co-I

1 U54 RR031263-01A1 (Kern)                                    07/01/11-06/30/16

NCATS

Kentucky Center for Clinical and Translational Science

At the University of Kentucky (UK), we have established the Center for Clinical and Translational Science (CCTS) as a home for clinical and translational research. Our overarching goal is to transform the pace, effectiveness, and quality of translational research at UK which will result in better health for the people of mid-Appalachia. Scientific discovery offers the potential for improved care, with community-based research offering a faster impact on health through a better dissemination of optimal medical care. UK will form a collaboration with Marshall University and we will form an Appalachian Translational Research Network involving not only Marshall, but also the CTSAs at the Ohio State University, University of Cincinnati, Morehead University, and Pikeville School of Osteopathic Medicine. This network will be especially important in the further development of our strong programs in community based participatory research.

Role: Co-Investigator.

R24MD008018 (Swanson & Schoenberg) 5/01/13-4/30/16

NIH

Appalachians Together Restoring the Eating Environment (Appal-TREE)

The main objective of this project is to develop community infrastructure, assess preferences, and pilot test a program designed to increase access to and consumption of healthy foods in the rural food desert of Appalachia.

Role: Co-I

2014-211 (Schoenberg) 1/1/15 – 12/31/16

Retirement Research Foundation

Grandfamilies in Gardens

We aim to improve food security and mental and physical health among older adults by testing an intergenerational gardening program.

Role: Co-I

P20RR16481 (INBRE) (Stromberg) 05/01/12 – 07/31/15

University of Louisville

Kentucky IDeA Networks of Biomedical Research Excellence

Faculty, post doc, and research students will conduct research in bioinformatics, producing research papers and publications on results of bioinformatics research. They will also attend conferences including the regional meeting and poster presentations related to the bioinformatics field. Pilot projects will introduce biomedical researchers to new technologies available in their respective fields

1 U01 CE001675-01 (Coker) 09/01/09 – 08/31/15

Green Dot across the Bluegrass: Evaluation of primary prevention intervention to reduce sexual violence

The goal of this study is to prospectively determine whether relative to students in high schools without Green Dot, those in schools with Green Dot report lower rates of sexual violence, a greater frequency of bystander behaviors, and fewer social norms supporting sexual violence. Finally because Green Dots draws on social diffusion of innovation theory we propose to determine how Green Dot influences bystander behaviors in the first and second order social networks of students who do and do not receive Green Dot training.

Role: Co-Investigator

1 R01 MD004598-01 (Coker) 09/25/09 – 04/30/15

Does Violence Against Women Result in Disparities in Cancer Care for Women with Breast, Colorectal or Cervical Cancer?

The goal of this study is to determine whether violence against women is associated with disparities in breast cancer, colorectal cancer, and cervical cancer care outcomes to include not receiving cancer screening at recommended intervals, being diagnosed with cancer at a later stage, not receiving recommended cancer treatment including supportive/palliative care, and poorer cancer specific survival among women diagnosed with these cancers in Kentucky and adjusting for relevant confounders including race, socioeconomic status, having health insurance, rural residence, and specific regions of high poverty (e.g., living in the Appalachian region of eastern Kentucky or the Delta region of western Kentucky).

Role: Co-Investigator

TC-1403-14049 (Williams) 01/01/15 – 12/31/17

PCORI

Project ACHIEVE: Achieving Patient-Centered Care and Optimized Health In Care Transitions by Evaluating the Value of Evidence

Project ACHIEVE’s long term objective will be to provide detailed, comprehensive guidance for the design, implementation and maintenance of transitional care strategies for hospital-to-postacute care that optimize patient and caregiver outcomes in varying healthcare contexts.

Role: Co-I

2P20RR020145-06 (Ebersole) 09/23/04 –07/31/14

Center for Biologic Basis of Oral/Systematic Diseases

The goal of this study is to investigate the contribution of chronic inflammation to oral and systemic. The CBBO/SD provides an infrastructure for development of the junior faculty by providing grants management support, educational opportunities, a biostatistics/bloinformatics core, and a clinical research center.

Role: Co-Investigator

1 R324A110204 (Effgen) 07/01/11 – 06/30/14 IES

Relationship of Student Outcomes to Physical Therapy School Services

The proposed prospective multi-methods observational, cohort study will assist in the identification of service delivery systems and intervention practices and activities that are associated with better educational outcomes for students with disabilities receiving and physical therapy as related services in schools.

Role: Co-Investigator.

R01 AG029476 (Capilouto) 09/15/07-08/31/12

Arizona State University

Discourse Processing in Healthy Aging

This project will investigate relationships between cognitive, memory, and discourse for different age cohorts.

1 R34 AR060278-01 (Crofford) 01/17/11 – 01/16/12

University of Iowa

Effectiveness of TENS on Fibromyalgia Pain

Planning grant for a randomized controlled trial to investigate the impact of TENS on FM pain.

Role: Co-Investigator

3 P20 RR0200145-05S1 (Ebersole) 09/24/09- 09/23/11

ARRA Supplement: An Intervention Trial for Effects of Oral Health Improvement of Adverse Maternal-Fetal Outcomes of Gestational Diabetes

The goal of this study is to investigate the relationship between periodontal health and adverse maternal-fetal outcomes.

Role: Co-Investigator

1 R03 HL096891-01 (Murphy) 05/11/09 – 04/30/11

National Heart Lung and Blood Institute
ARRA: Pneumocystis jirovecii and macrophages in COPD

This project will investigate a novel mechanism of pathogenesis which may provide targets for potential future therapeutic interventions for patients with COPD.

Role: Co-Investigator

R01 CA138797-01A2 (Chendil) 08/01/10 – 05/31/11

NCI

Dietary Prevention of Prostate Cancer

The major goals of this project are to investigate the interaction between AktlCREB and Par-4 signaling, (Aim 1); and how WA modulates the pro-apoptotic signaling in AIPC (Aim 2); evaluate the effects of WA on androgen- -independent prostate tumor growth in the transgenic adenocarcinoma of mouse prostate (TRAMP) model (Aim 3); and examine the mechanisms of WA-mediated tumor inhibition in TRAMP and/or TRAMP cell lines (Aim 4).

Role: Co-Investigator

Kentucky Lung Cancer Research Program (Andrykowski) 12/01/08 – 11/30/10

Disparities in Mental Health Outcomes Between Rural and Nonrural Lung Cancer Survivors

The goal of this study is to identify (a) the nature and magnitude of disparities in mental health outcomes in NSCLC survivors linked to rural residence; and (b) differences between rural and nomural NSCLC survivors in resources (intrapersonal, interpersonal, informational, tangible) potentially linked to observed disparities in mental health outcomes.

Role: Co-Investigator

Commonwealth of Kentucky Lung Cancer Research Program (Fernander) 09/01/07 – 08/31/09

Examining the Breathe Free for Women (BFFW) Program among African American (AA) Women: A Pilot Study

The short-term objective of this study is to examine the effectiveness of the BFFW program among AA women. The long-term objective of this study is to improve smoking cessation intervention efficacy and decrease smoking among AA women, subsequently reducing disparate rates of lung cancer in this population.

Role: Co-Investigator

Research Triangle Institute 1-312-0208779 (Clayton) 07/01/03 – 10/16/08

Tobacco Initiation and Cessation Among New Soldiers

The main objective is to determine if differences exist in smoking and drinking by occupational specialty in the Army. Because there is a tendency in the military to house in the same facilities those studying the same occupational specialty, it is possible to examine the relationship of both individual-level and environmental-level influences on tobacco use.

Role: Statistician

NIH/NCRR M01 RR02602-22 (Perman) 04/01/06 – 03/31/07

The mission of the UK General Clinical Research Center is to provide investigators with optimal facilities and resources to conduct clinical research, to encourage collaboration among scientists, to train health care professionals in clinical research, and to aid in the translation of basic scientific knowledge into a better understanding and treatment of human diseases to advance the quality of patient care.

Role: Statistician

CDC U17/CCU424128-01 (Walsh) 09/01/04 – 06/30/08

Development of the National Violent Death Reporting System (2004)

CDC U17CCU424128-03 (Walsh) 09/01/06 – 08/01/07

Supplement to conduct surveillance of sudden unexplained infant deaths

To conduct statewide surveillance of sudden unexplained infant deaths detailing the feasibility of collecting, abstracting, and coding SUID information to ultimately reduce these infant deaths.  Information is currently being collected on Kentucky SUID deaths occurring in 2004 and 2005

Role: Statistical Faculty Advisor

Health Education through Extension Leadership (Simmons) 07/01/07 – 06/30/08

The Effects of a Women’s Mental Health Awareness Campaign on Health Outcomes

The purpose of this project is to design and implement a mental health awareness curriculum for women in Western Kentucky and over time to compare health outcomes between women who do and do not receive the curriculum.

Role: Co-Investigator

REGISTRAT, Inc. (Bush) 09/01/06 – 07/31/07

Provide statistical support on issues for product and disease registries and post-marketing commitments. Consult in the development of protocols, CRFs, biostatistical analysis plans and study reports. Prepare the statistical sections of manuscripts and abstracts for publications and scientific meetings.

Role: PI

**PRESENTATIONS, POSTERS & PANELS (SELECTED)**

**Bush HM**, Luu HT, Brancato CJ, Sprang G, Coker A **(Invited)**. “Quantifying the health burden of lifetime violence experiences.” Ross University Medical School Research Day Symposium: Trauma’s Impact on Physical Health across the Lifespan. Knoxville, TN. May 18, 2018.

Coker AL, **Bush HM**, Recktenwald E **(Invited.) “**Green Dot Across the Bluegrass: Evaluation of a bystander-based RCT intervention in high-schools across Kentucky 2010-2014.” Grand Rounds, Department of Psychiatry, University of Kentucky, Lexington, Kentucky. July 20, 2017.

Coker AL, **Bush HM**, Recktenwald E, Parks K, Lewis M **(Invited)**. “Bystander Intervention: Building the Evidence Base for Sexual and Domestic Violence Prevention.” Webinar hosted by PreventConnect and The National Sexual Violence Resource Center. June 26, 2017.

# Bush HM, Coker AL, Brancato C, Clear E, Recktenwald EA. (Invited) ”Evaluating a School-Based Bystander Intervention: Can time-dependent confounders help us understand?” Presented at Medical College of Wisconsin. Milwaukee, WI. February 2017.

# Bush HM with Recktenwald EA. (Invited) “RCT Testing Bystander Effectiveness to Reduce Violence, a review of the data and description of the project. as implemented by Kentucky's regional rape crisis centers.” Kentucky Safety and Prevention Alignment Network Meeting. Frankfort, KY. January 2017.

# Bush HM, Coker AL, Clear ER, Davidov D, Fisher BS. “Using Optimization Designs to Evaluate Bystander Efficacy.” Presented at American Society of Criminology Annual Meeting. New Orleans, LA. November 2016.

# Bush HM, Coker AL, Brancato CJ, Carlson C. “Using Campus Climate and Enrollment Data to Explore the Impact of Sexual Violence Experienced on Retention.” Presented at American Society of Criminology Annual Meeting. New Orleans, LA. November 2016.

# Bush HM (Invited). “Challenges and Opportunities in Surveying Students: Real Examples from Bystander Evaluations.” Presented at the 2nd CRVAW Lecture Series*, Researching Violence: A Series Addressing Research Challenges, Strategies, and Practices*. Lexington, KY. October 2016.

# Bush HM, Coker AL, Brancato C, Clear E, Recktenwald EA. “Evaluation of a Bystander Intervention Among High School Students: The Role of Bystander Behaviors and Environment” Presented at 124th Annual APA Convention. Denver, CO. August 2016.

# Bush HM (Invited). “All Mixed Up, You Don’t Know What to Do: The Challenge of Using (and Reviewing) Mixed Models” Presented at 2015 JAT Manuscript Reviewers' Workshop, St. Louis, MO. June 2015.

# Coker A, Cook-Craig, Bush HM. “Does Green Dot (A Bystander-Based Primary Prevention Intervention) Reduce Violence in Kentucky High Schools?” Presented at 16th Annual Ending Sexual Assault and Domestic Violence Conference. Lexington, KY. December 2014.

**Bush HM**, Brancato CJ, Wood CL, Stromberg AS, Bathke A. *“*Bringing Real-World Problems and Expectations to the Classroom through Consulting*”* Presented at Joint Statistical Meetings. San Diego, CA. July 2012.

Li H-F, **Bush HM**, Stein P. “An Environmental-wide association study (EWAS) on Periodontitis using NHANES,” Poster presented at Midwest Biopharmaceutical Statistics Workshop, Muncie, IN. May 2012. Chosen as the winner of the Charlie Sampson Student Poster competition.

**Bush HM**, Brancato CJ, Wood CL, Stromberg AS, Bathke A. “Preparing Future Applied Statisticians: Enhancing Graduate Education through Consulting*”* Poster presented at ASA Conference on Statistical Practice. Orlando, FL. February 2012.

**Bush HM**, Guo J, Mendiondo M, McQuerry K, Mannino DM, Crofford LJ. *“*Role of Weights in Investigating Health Outcomes: An Example Using the Kentucky Women's Health Registry” Presented at APHA. Washington DC. November 2011.

**Bush HM**, Brancato CJ, Wood CL, Stromberg AS, Bathke A. “A New Approach to Statistical Consulting”. Poster presented at Southeast Regional IDeA Meeting. New Orleans, LA. September 2011.

**Bush HM**. “Higher order assessments: Bridging the gap between expectations and outcomes “ Presented at Joint Statistical Meetings. Miami, FL. August 2011. Recipient of Teaching Statistics in the Health Sciences section Contributed Paper Award.

**Bush HM**. “Utilizing projects in teaching statistics to professional students: successes and challenges”. Presented at Joint Statistical Meetings. Denver, CO. August 2008.

**Bush HM (Invited)**, Rayens W. “Khatri-Rao products and conditions for the uniqueness of PARAFAC solutions for  arrays.” Presented at Trilinear Methods in Chemistry and Psychology. Chania, Crete, June 2006.

**BOOKS**

**Bush, HM**. (2012). Biostatistics: An applied introduction for the public health practitioner. NY: Delmar.

Coker, A & **Bush HM**. (2020). Work-Life Balance. A Bonomi & C Rennison (Eds.), [*Women Leading Change in Academia: Breaking the Glass Ceiling, Cliff, and Slipper*](https://titles.cognella.com/women-leading-change-in-academia-9781516548255) (p. 195). San Diego, CA: Cognella.

**PAPERS (ALPHABETICAL)**

**\*Indicates student or mentee**

**Complete Pubmed reference list (111 publications):**

<http://www.ncbi.nlm.nih.gov/sites/myncbi/1J9Q7vn5tEbAZ/bibliography/48049847/public/?sort=date&direction=ascending>

**Citations on Google Scholar:** <https://scholar.google.com/citations?user=L35ZUHYAAAAJ&hl=en&oi=ao>

# Anderson JW, Reynolds RL, Bush HM, Rinsky JL, Wasnock “Effect of a behavioral/nutritional intervention program on weight loss in obese adults: a randomized controlled trial.” *Postgraduate Medicine*, 2011, Volume 123(5), pp. 205-213.

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Association of Clinical Translational Statisticians (ACTStat)