CURRICULUM VITAE

LACEY H. ETZKORN, Ph.D.

PROFESSIONAL DATA

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MyBibliography: Linked Here

JHU Site: https://publichealth.jhu.edu/faculty/4768/lacey-etzkorn

ORCiD: https://orcid.org/0000-0001-7107-2763

Google Scholar: Linked Here

Website: https://etzkorn.github.io

Github: https://github.com/etzkorn

EDUCATION AND TRAINING

Doctor of Philosophy, Biostatistics, April 2022

    Johns Hopkins University, Bloomberg School of Public Health

    Department of Biostatistics

Bachelor of Arts, Mathematics, May 2015

    Saint Olaf College,

    Department of Mathematics, Statistics, and Computer Science

Postdoctoral Fellowship, April 2022 – April 2024

    Johns Hopkins University, Bloomberg School of Public Health,

    Department of Epidemiology and Center on Aging and Health

Other Relevant Trainings

    Junior Fellow, May 2014 – August 2014

        Summer Joint Program in Survey Methodology, University of Maryland

Fellow, September 2014 – July 2015

Center for Interdisciplinary Research, Saint Olaf College

Summer Fellow, June 2013 – August 2013

Summer Institute for Biostatistics, University of Pittsburgh

PROFESSIONAL EXPERIENCE

Johns Hopkins University

Assistant Scientist, April 2024 – present

Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health,

Postdoctoral Fellow, April 2022 – April 2024

Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health

Other Relevant Experience

Questionnaire Design Intern, May 2014 – August 2014

National Agricultural Statistics Service, United States Department of Agriculture, Washington, D.C.

Research Intern, September 2013 – January 2014

Cannon River Watershed Partnership, Northfield, MN

PROFESSIONAL ACTIVITIES

Society Membership

Member, April 2024 – present

International Society for the Measurement of Physical Behavior

Research Centers

Biostatistician, April 25, 2024 – present

Center on Aging and Health, Johns Hopkins University

Consultant, April 25, 2024 – present

Johns Hopkins Biostatistics Center, Johns Hopkins University

Working Groups

Member, ENGAGE: Research on Energy, Activity and Aging

Member, Wearable and Implantable Technology Working Group

HONORS AND AWARDS

Honors

Magne cum Laude, May 2015

Saint Olaf College

Distinction in Statistics, May 2015

Department of Mathematics, Statistics, and Computer Science, Saint Olaf College

Awards

"Statistically Significant", May 2015

Department of Mathematics, Statistics, and Computer Science, Saint Olaf College

PUBLICATIONS

Marino FR, Wu HT, **Etzkorn L**, Rooney MR, Soliman EZ, Deal JA, Crainiceanu C, Spira AP, Wanigatunga AA, Schrack JA, Chen LY. Associations of Physical Activity and Heart Rate Variability from a Two-Week ECG Monitor with Cognitive Function and Dementia: the ARIC Neurocognitive Study. medRxiv [Preprint]. 2024 Mar 4:2024.03.01.24303633. doi: 10.1101/2024.03.01.24303633. PMID: 38496423; PMCID: PMC10942521.

Etzkorn LH, Davoudi A, Dooley EE, Gabriel KP, Chen L, Crainiceanu CM, Schrack JA, Wanigatunga AA. Physical Activity Cut-Points for Older Adults using the Zio XT Onboard Accelerometer. BMC Digital Health. Accepted 2024 April 3. DOI: 10.1186/s44247-024-00087-8.

Etzkorn LH, Coënt QL, van den Boogaard M, Rondeau V, Colantuoni E. A joint frailty model for recurrent and competing terminal events: Application to delirium in the ICU. Statistics in Medicine. 2024;1-14. DOI: 0.1002/sim.10053. PMID: 38564224. NIHMSID:1994487.

Davoudi A, Urbanek JK, **Etzkorn L,** Parikh R, Soliman EZ, Wanigatunga AA, Gabriel KP, Coresh J, Schrack JA, Chen LY. Validation of a Zio XT Patch Accelerometer for the Objective Assessment of Physical Activity in the Atherosclerosis Risk in Communities (ARIC) Study. Sensors. 2024; 24(3):761. DOI: 10.3390/s24030761. PMID: 38339479. PMCID: PMC10857412.

Etzkorn LH, Heravi AS, Knuth ND, Wu KC, Post WS, Urbanek JK, Crainiceanu CM. Classification of free-living body posture with ECG patch accelerometers: application to the multicenter AIDS cohort study. Statistics in Biosciences. 2023 Jun 28:1-20. DOI: 10.1007/s12561-023-09377-7. PMID: 38715709. PMCID: PMC11073799.

Etzkorn LH, Liu F, Urbanek JK, Heravi AS, Magnani JW, Plankey MW, Margolich JB, Witt MD, Palella Jr FJ, Haberlen SA, Wu KC, Post WS, Schrack JA, Crainiceanu CM. Patterns of objectively measured physical activity differ between men living with and without HIV. AIDS (London, England). 2022 Sep 1;36(11):1553-62. DOI: 10.1097/QAD.0000000000003274. PMID: 35979829. PMCID: PMC9395149.

Dougherty R, Liu F, **Etzkorn LH**, Wanigatunga AA, Walter PJ, Knuth ND, Schrack JA, Ferrucci L. Validation of accelerometer placement to capture energy expenditure using doubly labeled water. Applied Physiology, Nutrition, and Metabolism. 2022. DOI: 10.1139/apnm-2022-0192. PMID: 35939837.

Wesner E, **Etzkorn L**, Bakre S, Chen J, Davis A, Zhang Y, Yasar S, Rao A, Luciano M, Wang J, Moghekar A. The Clinical Utility of the MOCA in iNPH Assessment. Frontiers in Neurology. 2022 May 23;13:887669. DOI: 10.3389/fneur.2022.887669. PMID: 35677341. PMCID: PMC9168991.

Heravi AS, **Etzkorn LH**, Urbanek JK, et al. HIV infection is associated with variability in ventricular repolarization: The multicenter AIDS cohort study (MACS). Circulation. 2020; 141(3):176-187. DOI: 10.1161/CIRCULATIONAHA.119.043042. PMID: 31707799. PMCID: PMC7077971.

Hodgson A, **Etzkorn LH**, Everhart A, Nooney N, Bestrashniy J. Exploring the Validity of Developing an Interdisciplinarity Score of a Patient's Needs: Care Coordination, Patient Complexity, and Patient Safety Indicators. Journal for Healthcare Quality. 2017. DOI: 10.1097/JHQ.0000000000000062.

PRACTICE ACTIVITIES

Software

Creator*,* **postuR***,* Posture Classification and Activity Measures for Triaxial Accelerometers in ECG Patches. R Package. GitHub. https://github.com/etzkorn/postuR.

Contributor, **frailtypack**, Shared, Joint (Generalized) Frailty Models. R Package. Comprehensive R Archive Network (CRAN). https://cran.r-project.org/web/packages/frailtypack/index.html.

TEACHING

Teaching Assistantships

Lead TA, **Longitudinal Data Analysis**, 2019-2022

Johns Hopkins University School of Public Health

Lead TA, **Multilevel Models**, 2019-2022

Johns Hopkins University School of Public Health

TA, **Statistical Methods in Public Health**, 2018-2019

Johns Hopkins University School of Public Health

TA, **Statistical Computing**, 2019

Johns Hopkins University School of Public Health

TA, **Statistical Reasoning in Public Health, Summer Institute**, July 2018

Johns Hopkins University School of Public Health

TA, **Longitudinal Data Analysis, Summer Institute**, July 2018

Johns Hopkins University School of Public Health

TA, **Multilevel Models, Summer Institute**, July 2018

Johns Hopkins University School of Public Health

TA, **Data Analysis Workshop I & II, Winter Institute**, January 2018

Johns Hopkins University School of Public Health

Lab Instructor, **Biostatistics for Public Health**, 2016

Johns Hopkins University Krieger School of Arts and Sciences

Grader, **Computer Science for Mathematics and Statistics**, 2014

Department of Math, Statistics, and Computer Science,

Saint Olaf College

Grader, **Statistics for Scientists**, 2013

Department of Math, Statistics, and Computer Science,

Saint Olaf College

Grader, **Calculus I**, Department of Math, Statistics, and Computer Science, 2012

Saint Olaf College

ADDITIONAL INFORMATION

Personal statement

Dr. Lacey H. Etzkorn is a data scientist and biostatistician who leverages wearable sensor data from large cohort studies to unravel the roles physical activity and sedentary behaviors play in aging and multi-morbidity. In her work as a Ph.D. candidate, she utilized accelerometry data from an ambulatory ECG patch to classify participant's posture. This work enabled cardiologists with the Multicenter Aids Cohort Study (MACS) to better understand differences in heart rhythms between men living with and without HIV. In her work at the Johns Hopkins Center on Aging and Health, Dr. Etzkorn works in interdisciplinary teams including clinicians, epidemiologists, and engineers to deploy multi-sensor wearable devices in clinical studies. She is responsible for storing and processing the sensor data, as well as disseminating summarized sensor results to their respective studies and aiding researchers in the use and interpretation of these results.

Dr. Etzkorn is also a committed educator who delights in making difficult concepts in statistical modelling and computing intuitive for diverse audiences. Her experience as an educator spans from leading instruction in a lab of professional and graduate students to tutoring high school students in AP statistics.

Keywords

Biostatistics, Statistics, Statistical Consulting, Data Science, Wearable Sensors, Signal Processing, Longitudinal Data Analysis, Survival Analysis, Recurrent Event Analysis, Physical Activity, Exercise Science, Aging, Gerontology