Hanna Lindner

501-A Blockley Hall, 423 Guardian Dr. Philadelphia Pennsylvania, 19104, USA
+1 (952) 393–9036 | hlindner@pennmedicine.upenn.edu | www.hannalindner.com

EDUCATION

University of Pennsylvania, Perelman School of Medicine Philadelphia, PA, USA
PhD Candidate of Biostatistics August 2016-Present
Master of Science, Biostatistics May 2018
Relevant coursework: Spatial Statistics; Probabilistic Models; Missing Data; Longitudinal Data Analysis

University of Central Florida, College of Sciences Orlando, FL, USA
Bachelor of Science, Statistics (Summa Cum Laude) May 2016

RESEARCH EXPERIENCE

Dissertation, University of Pennsylvania June 2018-Present
Advised by Dr. Warren Bilker & Dr. Phyllis Gimotty

- Creation of a new modeling framework to assess diagnostic ability of traditional and non-traditional biomarkers with applications in mental health and melanoma which will result in three publications
- Developed a model to obtain discrete diagnostic likelihood ratios (DLR) allowing for covariate adjustment and decomposition of the DLR

Graduate Student Researcher, University of Pennsylvania September 2018-Present
Principle Investigator: Dr. Phyllis Gimotty

- Conducted literature review of existing methods that identify and test for nontraditional biomarkers
- Compared power and type I error of existing statistics to a recently developed statistic using simulation studies in R which will result in at least one publication
- Identified potential traditional and nontraditional genetic biomarkers for head and neck cancer using the best performing methods described in the simulation studies

Career Exploration Fellow, Univ. of Pennsylvania Office of Sustainability February 2020-Present
Host: Natalie Walker and Madeline Schuh

- Participated in the PhD Career Exploration Fellowship which allows for experience outside of the traditional career trajectory
- Developed a web-based waste dashboard using RShiny to assess and visualize longitudinal trajectory of waste (solid waste, recycling, and compost) for all campus buildings
- Will conduct a formal longitudinal analysis to investigate significant trends and identify poorly performing buildings on campus
- Attended and shared works in progress at Environmental Sustainability Advisory Committee meetings made up of faculty and staff working to achieve goals laid out in Penn's Climate Action Plan 3.0

Master's Thesis, University of Pennsylvania August 2017-June 2018
Advised by Dr. Justine Shults & Dr. Deirdre Sawinski

- Identified kidney dialysis noncompliance risk factors and assessed their impact on post-transplant outcomes using Cox regression to influence decision making policy resulting in one publication currently under review
- Collaborated with nephrologists and clinicians across institutions to develop potential risk factor variables.

National Cancer Institute, National Institutes of Health Rockville, MD, USA
Division of Cancer Epidemiology and Genetics Intern May 2016-August 2016
Principle Investigator: Philip Rosenberg

- Compared applications of a traditional and correlated Poisson age, period, cohort model to prostate cancer risk and investigate geographic and demographic disparities in the US using SEER data with analysis performed in R and MATLAB
- Presented findings for two conferences hosted by NIH

Publications & Presentations

- Modi, M.B., Gimotty, P., Ming, M.E., Jariwala, N., Elenitsas, R., Miller, C., **Lindner, H.**, Moshiri, A.S., Schwartz, L.E., Lal, P., Reyes, M.C., Elder, D.E., Xu, X. Urethral involvement is associated with higher mortality and local recurrence in vulvar melanoma: a single institutional experience. *In review (American Journal of Surgical Pathology).* May 2020
- Sawinski D., **Lindner H**., Shults J., Locke J.E., Cohen, J.B., MacLennan P.A., Reese, P.P. Do actions speak louder than labs? A retrospective cohort study of dialysis non-adherence and kidney transplant outcomes. *In review (Annals of Internal Medicine).* April 2019.
- Dawson, P., Gimotty, P., **Lindner, H**., Guerry, D. The area between cumulative distribution functions and additional metrics to identify nontraditional biomarkers. *In progress.* 2019
- **Lindner, H**., & Bilker, W. A Nonparametric Procedure for Comparing Dependent Kappa Statistics. *In progress*. 2019.
- Talton, W., **Lindner, H**., & Rovito, M. J. Increasing Urologic Care Ratios: Implications of Male Patient Care in Florida. *American journal of men's health,* 2016.
- "Nonparametric Procedure for Comparing Dependent Kappa Statistics". ENAR; Denver, CO; July 2019.
- "Regional Trends and Patterns in Prostate Cancer Incidence Among Blacks and Whites in the United States". Symposium on Cancer Health Disparities; Bethesda, MD; October 2016.

Computing

- Expert: R
- Working knowledge: SAS, Stata, SPSS, MATLAB
- Applications: LaTex, knitr, RMarkdown, StatWeave, GitHub, RShiny