

# Benjamin ACKERMAN

## PERSONAL DATA

---

ADDRESS: 615 N. Wolfe St, E3031, Baltimore, Maryland 21205  
PHONE: 310-963-0578  
EMAIL: [backer10@jhu.edu](mailto:backer10@jhu.edu)  
WEB: [benjaminackerman.com](http://benjaminackerman.com)

## EDUCATION

---

- 2015 - PRESENT **PhD Candidate, Biostatistics**  
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD  
Advisor: Dr. Elizabeth STUART  
Thesis Topic: Statistical methods for generalizability of randomized trials  
GPA: 3.81/4
- 2011 - 2015 **Bachelor of Arts, Public Health Studies**  
Johns Hopkins University, Baltimore, MD  
Minor: Applied Mathematics and Statistics  
Honors Thesis: *The Association Between Genetic Variants and IQ among Individuals with Autism Spectrum Disorders* | Advisor: Dr. Yin YAO  
GPA: 3.83/4

## RELEVANT EXPERIENCE

---

- SUMMER 2018 | **Fellow, Data Science for Social Good**  
*Center for Data Science & Public Policy, University of Chicago, Chicago, IL*  
Partnered with AllianceChicago to build a predictive model to identify patients at risk of developing Type 2 Diabetes using de-identified electronic health records (EHR) data.
- Current*  
JUNE 2016 | **Research Assistant, Department of Biostatistics**  
*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD*  
Worked with thesis advisor Dr. Elizabeth Stuart to evaluate statistical methods for assessing and improving upon the generalizability of randomized controlled trials. Applied methods to a randomized trial related to methamphetamine dependence, and developed sensitivity analyses for partially unobserved effect modifiers.
- Current*  
MARCH 2016 | **Statistician/Programmer**  
*SAJE Consulting, Baltimore, MD*  
Conducted data analysis and produced publication-ready graphics for various research studies conducted by pharmaceutical and biotechnology companies using statistical software R. Contributed to analyses for reports to the following regulatory agencies: FDA, EMA and NOMA
- SEPT 2016 -  
AUG 2017 | **Research Assistant, Department of Mental Health**  
*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD*  
Collaborated with Dr. Heather Volk to examine the relationship between prenatal air pollution exposure and risk of Autism Spectrum Disorders, using data from the Boston Birth Cohort.
- OCT 2015 -  
OCT 2017 | **Research Assistant, Center for Public Health and Human Rights**  
*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD*

## Benjamin ACKERMAN

Worked with Dr. Tonia Poteat to estimate HIV risk among MSM, transgender and gender variant populations in Africa. Merged survey data across eight different countries, and explored issues regarding survey methodology and gathering data on sexual orientation and gender identity.

- SUMMER 2014 | **Undergraduate Intern**, Unit on Statistical Genomics  
*National Institute of Mental Health*, Bethesda, MD  
Evaluated the association between genetic variants and IQ among individuals with Autism Spectrum Disorders. Conducted statistical analysis using PLINK and FBAT software.
- SEPT-DEC 2013 | **Data Analyst**, Department of Infectious Diseases  
*Assaf Harofeh Medical Center*, Tzrifin, Israel  
Assessed the epidemiology of carbapenem-resistant enterobacter species in patients at AHMC and Detroit Medical Center. Determined risk factors for mortality for patients infected by CRE bacteria. Developed multivariate models to determine risk factors, and created a Kaplan Meier curve to assess patient survival over time.
- SUMMER 2013 | **Columbia Summer Institute Training in Biostatistics (CSIBS)**  
*Columbia University Mailman School of Public Health*, New York, NY  
Participated in 8-week program supported by the National Heart Lung and Blood Institute. Gained proficiency in SAS programming and conducted research in Center for Behavioral Cardiovascular Health with Dr. Keith Diaz.

## PUBLICATIONS

---

1. Lenis, D., **Ackerman, B.**, Stuart, E.A. (2018). "Measuring model misspecification: Application to propensity score methods on complex survey data." *Computational Statistics & Data Analysis*, <https://doi.org/10.1016/j.csda.2018.05.003>
2. Poteat, T., **Ackerman, B.**, Diouf, D., Ceasay, N., Mothopeng, T., Odette, K-Z, et al. (2017) "HIV prevalence and behavioral and psychosocial factors among transgender women and cisgender men who have sex with men in 8 African countries: A cross-sectional analysis." *PLoS Med*, 14(11): e1002422. <https://doi.org/10.1371/journal.pmed.1002422>
3. Stuart, E. A., **Ackerman, B.**, Westreich, D. (2017). "Generalizability of randomized trial results to target populations: Design and Analysis Possibilities." *Research on Social Work Practice*, 28(5), 532-537.
4. Tao, Y., Gao, H., **Ackerman, B.**, Guo, W., Saffen, D., Shugart, Y. Y. (2016). "Evidence for contribution of common genetic variants within chromosome 8p21.2-8p21.1 to restricted and repetitive behaviors in autism spectrum disorders." *BMC Genomics*, 17(1), 163.
5. Lazarovitch, T., Amity, K., Coyle, J. R., **Ackerman, B.**, Tal-Jasper, R., Ofer-Friedman, H., . . . , Marchaim, D. (2015). "The complex epidemiology of carbapenem-resistant enterobacter infections: A multicenter descriptive analysis." *Infection Control and Hospital Epidemiology*, 36(11), 1283-1291.

## HONORS AND AWARDS

---

- 2017 **JHSPH Delta Omega Poster Competition - 2nd Place (Applied Research)**
- 2015 **Best Senior Thesis in Public Health**
- 2011-2015 **Dean's List**

## TALKS AND PRESENTATIONS

---

## Benjamin ACKERMAN

- 2018 **Sensitivity Analysis for an Unobserved Moderator in Trial-to-Target-Population Generalization of Treatment Effects**  
*Society for Research on Educational Effectiveness (SREE) Spring 2018 Conference, Washington, DC, Contributed Talk.*
- Estimating Population Effects: Case Study of Generalizing Results of a Methamphetamine Dependence Trial**  
*International Conference on Health Policy Statistics (ICHPS), Charleston, SC, Contributed Talk.*
- 2017 **Characterizing the Burden of HIV and Specific Vulnerabilities among Transgender Women compared to Men who have Sex with Men across Eight Sub-Saharan African Countries**  
*Joint Statistical Meetings (JSM), Baltimore, MD, Topics Contributed Talk.*
- Characterizing the Burden of HIV and Specific Vulnerabilities among Transgender Women compared to Men who have Sex with Men across Eight Sub-Saharan African Countries**  
*Johns Hopkins LGBT Research Day, Baltimore, MD, Talk.*
- 2016 **Sensitivity Analysis for an Unobserved Moderator in RCT-to-Target-Population Generalization of Treatment Effects**  
*Joint Statistical Meetings (JSM), Chicago, IL, SPEED Talk and Poster.*
- 2015 **Genetic Variants and IQ Among Individuals with Autism Spectrum Disorder**  
*6th Annual Undergraduate Conference in Public Health, Baltimore, MD, Talk and Poster.*
- 2014 **Genetic Variants and IQ Among Individuals with Autism Spectrum Disorder**  
*National Institutes of Health Summer Research Program Poster Day, Bethesda, MD, Poster.*
- 2013 **The Relationship Between Dietary Sodium Intake and Mortality Risk**  
*BEST/CSIBS Research Symposium, New York, NY, Talk.*

## TEACHING EXPERIENCE

---

- FA 2018 **Advanced Data Science I (Guest Lecturer), JHSPH (25 graduate students)**  
Professors: Dr. Stephanie Hicks, Dr. Roger Peng  
Designed and led a 50-minute tutorial on creating R packages, Shiny apps and GitHub pages

## Graduate Teaching Assistant

- FA 2016-  
2018 **Public Health Biostatistics, JHU (225 undergraduate students)**  
Professors: Dr. Margaret Taub, Dr. Leah Jager  
Section Instructor. Reviewed introductory statistical concepts and R programming skills.
- SP 2018 **Causal Inference in Medicine and Public Health I, JHSPH (60 graduate students)**  
Professor: Dr. Elizabeth Stuart  
TA. Held weekly office hours to review causal inference topics for both experimental and non-experimental studies.
- SP 2017-  
2018 **Statistical Methods in Public Health III, JHSPH (500 MPH students)**  
Professors: Dr. Marie Diener-West, Dr. Leah Jager, Dr. Jim Tonascia  
TA. Held weekly office hours for to review regression topics, provided assistance with STATA programming.

## Undergraduate Teaching Assistant

- FA 2013- **Public Health Biostatistics, JHU** (200 undergraduate students)  
2014 Professors: Dr. Scott Zeger, Dr. Margaret Taub, Dr. Leah Jager  
Learning Den Tutor and Guest Lecturer. Held biweekly small group review sessions.

## SHINY WEB APPLICATIONS

---

- 2017 **How will the House Tax Bill Impact Graduate Students?**  
*Featured in Science Magazine (see section on Tuition Waivers)*  
<https://benjaminackerman.shinyapps.io/GOPtax2017/>

## COMPUTING SKILLS

---

- Languages** Proficient: R, Python, SQL  
Intermediate: SAS, SPSS, Stata  
**Markup**  $\text{\LaTeX}$ , knitr, markdown, Sweave  
**Other** Git, Microsoft Word, Excel, PowerPoint, Google Documents