

Chloe Krakauer

Seattle WA, 98112 | chloe.a.krakauer@kp.org | (919) 889-7846

EDUCATIONAL AND BIOGRAPHICAL INFORMATION

- University of Washington, Seattle** 2016-2021
Ph.D., Biostatistics
Dissertation advisors: Ken Rice, Ph.D. and Mauricio Sadinle, Ph.D.
- University of Washington, Seattle** 2012-2014
Masters of Science, Biostatistics
Academic advisor: Jim Hughes, Ph.D.
- Western Washington University** 2008-2012
Bachelors of Science, Mathematics and Minor in Business Administration, *magna cum laude*

PROFESSIONAL EXPERIENCE

- Kaiser Permanente Washington Health Research Institute** 2021-present
Collaborative Biostatistician II
Seattle WA
- My work involves a variety of epidemiologic studies and clinical trials.
 - Plan and conduct data analyses, disseminate results, and prepare manuscripts.
 - Write analysis plans, prepare grants, and consult investigators.
 - Plan journal club meetings.
 - Research project topics: associations between dementia risk or cognitive decline and each of eye diseases, adverse pregnancy outcomes, and employment characteristics; links between anticholinergic use and brain imaging measurements; opioid tapering; smoking cessation; and multiple statistical methodological projects (assessing well-testedness of hypotheses and missing confounder data in treatment monitoring studies).
- Kaiser Permanente Washington Health Research Institute** 2017-2021
Research Assistant
Seattle WA
- See aspects of collaborative biostatistician position above.
 - Research project topics: lung cancer screening, pharmaceutical pricing, smoking cessation and dental hygiene, home-based HPV testing, improvements in cardiovascular health care in small clinics, recruitment to volunteer samples for biobank, and modeling efficacy of different meningitis vaccination schedules.
- University of Washington**
Teaching Assistant for Introduction to R Summer 2020
University of Washington Summer Institutes (held virtually)
Seattle WA
- Answered questions via Slack/Zoom.
 - Class taught by Drs. Ken Rice and Timothy Thornton, UW
- Teaching Assistant for Biostatistics for the Health Sciences Winter 2020
Seattle WA
- Held regular office hours
 - Led discussion section
 - Class taught by Dr. Lyndia Brumback, UW
- Teaching Assistant for Design of Medical Studies Spring 2019
Seattle WA
- Delivered a lecture on blinding, factorial designs, and cross-in designs.
 - Held regular office hours, helping students design medical studies.

- Critiqued study designs during mock site reviews and other grading responsibilities.
- Responsible for maintaining website.
- Class taught by Dr. Thomas Fleming, UW

Seattle Epidemiologic Information Center (ERIC)

2014-2017

Biostatistician

Puget Sound Veterans Affairs Hospital, Seattle WA

- Planned and conducted data analyses, disseminated results, and prepared manuscripts.
- Wrote analysis plans, prepared grants, and consulted investigators.
- Managed and requested data and prepared data collection instruments.
- Conducted simulation studies to determine necessary sample size.
- Served as lead statistician on a national epidemiologic study.
- Research project topics: plan to evaluate coverage of a national data set; effects of deployment to the middle east on pulmonary health; participation among Veterans in health surveys; and associations between testosterone treatment with risk of prostate cancer, bladder cancer, and cardiovascular events.

HIV Prevention Trials Network

2012-2014

Research Assistant/Biostatistician

Fred Hutchinson Cancer Research Institute, Seattle

- Planning and conducting analyses with CDC fellow on risk of HIV transmission.
- Simulations to determine bias during interim analyses of clinical trial.
- Assess sensitivity to missing data using simulations.

PROFESSIONAL HONORS

N/A

MEMBERSHIPS

- Member, American Statistical Association 2018-present
- Member, International Biometric Society Western North American Region 2015-present

ORGANIZATIONAL SERVICE

- Member, working group to support biostatistics methodological grant writing 2023-present
- Biostatistics Journal Club presentations: 2021-2023
 - Discussion on significance testing and p-value interpretation
 - Wang Fitzmaurice (2006) single imputation method and application
 - Analyzing recurrent time-to-event analyses.
- Member, Pragmatic Clinical Trials Working Group 2022-present
 - Presentation on analyzing methods for analyzing data MNAR.

OTHER PROFESSIONAL SERVICE

- Career panels: Raleigh Charter High School, UW Biostatistics, UW Statistics 2021-2023

SPECIAL NATIONAL RESPONSIBILITIES

N/A

EDITORIAL RESPONSIBILITIES

- Reviewer, Vaccine (two in 2022, one in 2023)
- Reviewer, International Journal of Environmental Research and Public Health (one in 2022)

RESEARCH FUNDING (PRIOR 5 YEARS)

Past:

National Institute for Dental and Craniofacial Research ((NIDCR) 7/1/2014-4/30/2018
 1U01 DE024462-01 (McClure) \$648,053
 Oral Health 4 Life: Promoting Oral Health among Tobacco Quitline Callers

Role: student research assistant (biostatistician)

Vaccine Impact Modeling Consortium
P66050 (Jackson) 3/31/2016 – 12/31/2021
Gavi \$349,266 (total direct)

Role: student research assistant (biostatistician)

Agency for Healthcare Research and Quality 5/1/2015-4/30/2019
The Northwest Coalition for Primary Care Practice Support \$11,262,282
R18 HS023908 (Parchman)
Healthy Hearts Northwest
Role: student research assistant (biostatistician)

National Cancer Institute 8/1/2019-7/31/2021
R21 CA234003 (McClure) \$239,250 (total direct)
Development of a mHealth Intervention for Ambivalent Smokers
Role: collaborative biostatistician (15% FTE)

National Institute on Drug Abuse 3/15/2018-12/31-2022
R01 DA044970 (McClure) \$1,169,474 (total direct)
STRategies to Improve Pain and Enjoy Life (STRIPE) trial
Role: collaborative biostatistician (20% FTE)

National Institute on Aging 8/1/2018-8/31/2023
1U19 AG066567-01A1 (Crane, Larson, and *MacDonald) \$795,210 (to UW)
Reclaiming and Revitalizing ACT Neuroimaging Records
Role: collaborative biostatistician (20% FTE)
* Contact PI

National Institutes of Health 9/30/2021-6/30/2023
R21 AG069111-02 (Miller) \$323,694
Pregnancy complications and the development of Alzheimer's disease and related dementias in women in the Adult
Changes in Thought study
Role: collaborative biostatistician (10% FTE)

Current:

National Cancer Institute 5/1/2021-4/30/2023
R21 CA261199 (McClure) \$275,000 (total direct)
Design and Testing of a mHealth App for Ambivalent Smokers Living with HIV: A Randomized Pilot Study
Role: collaborative biostatistician (15% FTE)

National Institute on Aging 9/1/2019-8/31/2024
R01 AG060942 \$5,697,977
Aging eyes and aging brains in studying Alzheimer's disease: modern ophthalmic data collection in the Adult
Changes in Thought (ACT) study
Role: collaborative biostatistician (20% FTE)

National Institute on Aging
Adult Changes in Thought (ACT) U19 \$55M
Role: collaborative biostatistician (15% FTE)

Food and Drug Administration Sentinel 4/2023-9/2024
Subset Calibration (Shaw)
Role: collaborative biostatistician (30% FTE)

Pending review:

National Cancer Institute
R01 (*McClure and Heffner)
Evaluation of a Novel mHealth Intervention for People Who Are Ambivalent About Quitting Smoking: A Randomized Control Trial
Role: collaborative biostatistician (18% FTE)
* Contact PI

5 year study period

National Institutes of Health
Grant tracking number 13936235 (Tom)
Linking Midlife Occupational Complexity and Physical Activity to Later-Life Alzheimer's Disease and Alzheimer's Disease-Related Dementias: the Adult Changes in Thought Occupation Study
Role: collaborative biostatistician

4/1/2024-3/31/2029

\$4,131,079

Renewal to ACT Eye (see above)

2025-2030

PCORI
Letter of interest submitted (Dublin)
Comparative effectiveness and safety of anti-nausea medications in pregnancy
Role: collaborative biostatistician

5 year study period

\$4,810,705 (total direct)

TEACHING AND MENTORING RESPONSIBILITIES

N/A

PUBLICATIONS

Published papers in refereed (peer-reviewed) journals

1. Rice, K. M., & Krakauer, C. A. (2023). Three-Decision Methods: A Sensible Formulation of Significance Tests—and Much Else. *Annual Review of Statistics and Its Application*, 10, 525-546.
2. Lee, C. S., Krakauer, C., Su, Y. R., Walker, R. L., Blazes, M., McCurry, S. M., ... & Crane, P. K. (2023). Diabetic Retinopathy and Dementia Association, Beyond Diabetes Severity. *American journal of ophthalmology*, 249, 90-98.
3. Wartko, P. D., Krakauer, C., Turner, J. A., Cook, A. J., Boudreau, D. M., & Sullivan, M. D. (2023). STRategies to Improve Pain and Enjoy life (STRIPE): results of a pragmatic randomized trial of pain coping skills training and opioid medication taper guidance for patients on long-term opioid therapy. *Pain*.
4. McClure, J. B., Heffner, J. L., Krakauer, C., Mun, S., Klasnja, P., & Catz, S. L. (2023). Feasibility, Acceptability, and Potential Impact of a Novel mHealth App for Smokers Ambivalent About Quitting: Randomized Pilot Study. *JMIR mHealth and uHealth*, 11(1), e46155.
5. James Hughes, Brian D. Williamson, Chloe Krakauer, Gordon Chau, Brayan Ortiz, Jon Wakefield, Craig Hendrix, K. Rivet Amico, Timothy H. Holtz, Linda-Gail Bekker, and Robert Grant. Combining Information to Estimate Adherence in Studies of Pre-exposure Prophylaxis for HIV Prevention: Application to HPTN 067. *Statistics in Medicine*. March 2022.
6. Shores, M. M., Walsh, T. J., Korpak, A., Krakauer, C., Forsberg, C. W., Fox, A. E., ... & Matsumoto, A. M. (2021). Association Between Testosterone Treatment and Risk of Incident Cardiovascular Events Among US Male Veterans With Low Testosterone Levels and Multiple Medical Comorbidities. *Journal of the American Heart Association*, 10(17), e020562.
7. Coleman, Katie F., Krakauer, Chloe, and Anderson, Melissa, et al. "Improving Quality Improvement Capacity and Clinical Performance in Small Primary Care Practices." *The Annals of Family Medicine* 19.6 (2021): 499-506.
8. Kenneth Rice, Tyler Bonnett, and Chloe Krakauer. Knowing the signs: a direct and generalizable motivation of two-sided tests. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 2020.
9. McClure, J.B.; Anderson, M.L.; Krakauer, C.; Blasi, P.; Bush, T.; Nelson, J.; Catz, S.L. Impact of a Novel Oral Health Promotion Program on Routine Oral Hygiene among Socioeconomically Disadvantaged Smokers: Results from a Randomized Semi-Pragmatic Trial. *Translational Behavioral Medicine*. February 2019.

10. Blasi, P.R.; Krakauer, C.; Anderson, M.L.; Nelson, J.; Bush, T.; Catz, S.L.; McClure, J.B. Factors Associated with future dental care utilization among low-income smokers overdue for dental visits. *BMC Oral Health*. November 2018, 18 (1), 183.
11. Walsh TJ, Shores MM, Krakauer CA, Forsberg CW, Fox AE, Moore KP, et al. (2018) Testosterone treatment and the risk of aggressive prostate cancer in men with low testosterone levels. *PLoS ONE* 13(6): e0199194. <https://doi.org/10.1371/journal.pone.0199194>
12. Hall, G.; Young, A.; Krakauer, C.; Watson, C.C.; Cummings, V.; Mayer, K.; Koblin, B. Sexual Risk Behaviors Among Black Men Who Have Sex With Men Who Also Report Having Sex With Transgender Partners: Analysis of HIV Prevention Trials Network (HPTN) 061 Study. *AIDS Education and Prevention*. October 2017, Vol. 29, No. 5: 418–431.

Accepted peer-reviewed papers in press

N/A

Non-refereed papers/articles

1. Krakauer, C., & Rice, K. (2021). Chloe Krakauer and Kenneth Rice’s contribution to the Discussion of ‘Testing by betting: A strategy for statistical and scientific communication’ by Glenn Shafer. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 184(2), 452-453.

Book chapters

N/A

Published technical reports

N/A

Published abstracts from professional conferences

1. McClure, J.B., Heffner, J.L., Krakauer, C., Mun, S., Xian, Y., Singh, U., & Catz, S. GEMS: A Randomized Pilot Study of Feasibility, Acceptability, & Potential Impact of a Novel mHealth App for Smokers Ambivalent About Quitting. Society for Research on Nicotine and Tobacco (poster); San Antonio, TX; March 2023.
2. Lee, C. S., Su, Y. R., Krakauer, C., Walker, R., Lee, A. Y., O’Hare, A., ... & Crane, P. K. (2021). Diabetic retinopathy and dementia link is more than microvascular disease and poor glycemic control mechanisms. *Investigative Ophthalmology & Visual Science*, 62(8), 1171-1171.

Digital and other novel forms of scholarship

N/A

INVITED PRESENTATIONS

Center for Statistics and Social Sciences

January 2023

Invited Presentation

Presentation title: Toss the bathwater, keep the baby: how p-values can still be useful

OTHER PRESENTATIONS

Oral

Joint Statistical Meetings, virtual

August 2021

Contributed Session: Section on Bayesian Statistical Science

Presentation title: Decision-Theoretic Justification for Winner's Curse Reduction

WNAR, virtual

June 2021

Student Paper Competition

Paper/presentation title: Using decision theory to avoid fallacies of *post hoc* power

Joint Statistical Meetings, Vancouver BC

July 2018

Biometrics Section: Modern Methods and Applications for HIV/AIDS Research

Talk title: Statistical considerations when modeling with ordinary differential equations

Poster

Joint Statistical Meetings, virtual

August 2020

(Since it was virtual, each poster was accompanied by a recorded presentation)

Invited Poster Session

Poster title: Regression Estimation with Logit Additive Nonignorable Missingness
Using Auxiliary Marginal Information

Contributed Poster Session: Section on Bayesian Statistical Science

Poster title: Decision-Theoretic Approach to *Post-Hoc* Significance Test Assessment,
Addressing the question “I had near-significant results...what now?”