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1 Education

2019 PhD Biostatistics - Boston University, Boston, Massachusetts, USA

2017 MA Biostatistics - Boston University, Boston, Massachusetts, USA

2015 BA Statistics, Epidemiology - University of Rochester, Rochester, New York, USA

2 Academic Positions

2019-present Research Associate, Senior Biostatistician - Harvard T.H. Chan School of Public Health, Center for Biostatistics in AIDS Research. Boston, Massachusetts, USA

2017-2019 Research Assistant - Boston VA Medical Center, MAVERIC Cooperative Studies Program for Clinical Trials. Boston, Massachusetts, USA

2015-2017 Training Grant Trainee (5T32GM074905) - Boston University School of Public Health, Department of Biostatistics. Boston, Massachusetts, USA

2012-2015 Research Assistant - University of Rochester Medical Center, Department of Emergency Medicine Research. Rochester, NY, USA

3 Teaching Experience

Boston University School of Public Health

Summer 2018 Instructor: Accelerated Statistics Training for Biostatisticians

Fall 2017 Instructor: Introduction to Statistical Computing (4 credits)

Summer 2017 Instructor: Accelerated Statistics Training for Biostatisticians

Spring 2017 Teaching Assistant: Introduction to Statistical Computing (4 credits)

University of Rochester

Undergraduate teaching assistant responsibilities include preparing material for and leading a weekly discussion seminar, holding weekly office hours, and grading assignments.

Spring 2015 Teaching Assistant: Mathematical Statistics (4 credits)

Spring 2015 Teaching Assistant: Applied Statistics I (4 credits)

Fall 2014 Teaching Assistant: Sampling Techniques (4 credits)

Fall 2014 Teaching Assistant: Applied Statistics I (4 credits)

Spring 2014 Teaching Assistant: Applied Statistics II (4 credits)

Spring 2014 Teaching Assistant: Applied Statistics I (4 credits)

Fall 2013   Teaching Assistant: Applied Statistics II (4 credits)

Fall 2013   Teaching Assistant: Applied Statistics I (4 credits)

Spring 2013 Teaching Assistant: Applied Statistics I (4 credits)

Fall 2012   Teaching Assistant: Applied Statistics I (4 credits)

4   Professional activities

Awards and Honors

2020 JSM Lifetime Data Science Section Student Paper Competition Award, recipient

2020 Boston University Biostatistics Doctoral Applied Research Paper Award, recipient

2018 Open Science Framework Pre-registration Challenge Award, recipient

2017-Present Mu Sigma Rho, Statistics Honor Society

2015-2017 Training Grant for Biostatistics (5T32GM074905), recipient

Professional membership and Service

2021 Society for Clinical Trials - Equity, Diversity, and Inclusion Committee, member

2020 Society for Clinical Trials - Scholarship Committee, member

2019-Present AIDS Clinical Trials Group Tuberculosis Transformative Science Group, member

2018-Present Society for Clinical Trials, member

2017-Present ENAR, member

2014-Present American Statistical Association, member

Journal Review Activities

2021-2024 Editorial Board Member, Journal of Clinical Oncology

2019-Present Statistical reviewer for Journal of Clinical Oncology

2019-Present Reviewer for Journal of Applied Statistics

Leadership

2021 Statistical and Epidemiologic Methods Collaborative Group, Center for Biostatistics in AIDS Research, Co-Chair

2020 Statistical and Epidemiologic Methods Collaborative Group, Center for Biostatistics in AIDS Research, Member

2020-Present R Programming Topic Resource Group, Center for Biostatistics in AIDS Research, Member

2017-2018 Biostatistics Student Association, Boston University, Vice President of Academic Affairs

5   Statistical Computing

See all repositories at https://github.com/iweir

metaRMST R package for Weir et al. Biostatistics 2019.
(available from https://cran.r-project.org/package=metaRMST)

powerRMST R function for Weir and Trinquart. Clinical Trials. 2018.
(available from https://github.com/iweir/powerRMST)

6   Publications

6.1   Peer-reviewed journal articles

2019

1. **Weir IR**, Tian L, Trinquart L. Multivariate meta-analysis model for the difference in restricted mean survival times. *Biostatistics.* 2019.

2018

2. **Weir IR**, Marshall GD, Schneider JI, Sherer JA, Lord EM, Gyawali B, Paasche-Orlow MK, Benjamin EJ, Trinquart L. Interpretation of Time-to-event Outcomes in Randomized Trials: an online randomized experiment. *Annals of Oncology.* 2018.

3. **Weir IR**, Trinquart L. Design of Non-Inferiority Randomized Controlled Trials using the Difference in Restricted Mean Survival Times. *Clinical Trials.* 2018; 15(5):499-508.

4. Lord EM, **Weir IR**, Trinquart L. Design Analysis Indicates Potential Overestimation of Treatment Effects in Randomized Controlled Trials Supporting FDA Cancer Drug Approvals. *Journal of Clinical Epidemiology.* 2018; 103:1-9

5. Lepage C, Muehlmann M, Tripodis Y, Hufschmidt J, Stamm J, Green K, Wrobel P, Schultz V, **Weir IR**, Alosco ML, Baugh CM, Fritts NG, Martin BM, Chaisson C, Coleman MJ, Lin AP, Pasternak O, Makris N, Stern RA, Shenton ME, Koerte IK. Limbic system structure volumes and associated neurocognitive functioning in former NFL players. *Brain Imaging and Behavior.* 2018; 1-10.

6. Schultz V, Stern RA, Tripodis Y, **Weir IR**, Sollmann N, Coleman MJ, Pasternak O, Shenton ME, Koerte IK. Age at first exposure to repetitive head impacts is associated with smaller thalamic volumes in former professional American football players. *Journal of neurotrauma.* 2018; 35(2):278-85.

7. Mayinger MC, Merchant-Borna K, Hufschmidt J, Muehlmann M, **Weir IR**, Rauchmann B, Shenton ME, Koerte IK, Bazarian JJ. White matter alterations in college football players: a longitudinal diffusion tensor imaging study. *Brain Imaging and Behavior.* 2018; 12(1):44-53

2017

8. Park S, Gianotti-Sommer A, Molina-Estevez FJ, Vanuytsel K, Skvir N, Leung A, Rozelle SS, Shaikho EM, **Weir IR**, Jiang Z, Luo H, Chui DHK, Figueiredo MS, Alsultan A, Al-Ali A, Sebastiani P, Steinberg MH, Mostoslavsky G, Murphy GJ. A comprehensive, ethnically diverse library of sickle cell disease-specific induced Pluripotent stem cells. *Stem cell reports.* 2017; 8(4):1076-85.

2015

9. Eng KH, **Weir IR**, Tsuji T, Odunsi K. Immuno-stimulatory/regulatory gene expression patterns in advanced ovarian cancer. *Genes and Cancer.* 2015; 6(9-10):399

7   Presentations

National conferences

Invited

1. **Weir IR**, Rider J, Trinquart L. *ENAR 2020 Spring Meeting*, Nashville, Tennesee, USA, March 22-25 2020.

Contributed

1. **Weir IR**, Rider J, Trinquart L. *JSM 2020 Spring Meeting, recipient of student paper competition*, Philadelphia, Pennsylvania, USA, August 1-6 2020.

2. **Weir IR**, Rider J, Trinquart L. *SCT 2020 Spring Meeting*, Baltimore, Maryland, USA, May 17-20 2020.

3. **Weir IR**, Tian L, Trinquart L. Multivariate Meta-Analysis of Randomized Controlled Trials with the Difference in Restricted Mean Survival Times. *Society for Clinical Trials*, New Orleans, Louisiana, USA, May 19-22, 2019.

4. **Weir IR**, Tian L, Trinquart L. Multivariate Meta-Analysis of Randomized Controlled Trials with the Difference in Restricted Mean Survival Times. *ENAR 2019 Spring meeting*, Philadelphia, Pennsylvania, USA, March 24-27, 2019.

5. Lord EM, **Weir IR**, Trinquart L. Design Analyses of Randomized Controlled Trials Supporting FDA Cancer Drug Approvals. *Society for Clinical Trials*, Portland, Oregon, USA, May 20-23, 2018.

6. **Weir IR**, Trinquart L. Design of Non-Inferiority Randomized Controlled Trials using the Difference in Restricted Mean Survival Times. *ENAR 2018 Spring meeting*, Atlanta, Georgia, USA, March 25-28, 2018.

Posters

7. **Weir IR**, Trinquart L. Design of Non-Inferiority trials using the difference in Restricted Mean Survival Times. *Society for Clinical Trials*, Portland, Oregon, USA, May 20-23, 2018.

Local invited presentations

8. **Weir IR**. Surrogate outcomes in randomized controlled trials: Introducing a counterfactual mediation analysis in the multistate model framework for surrogate and clinical time-to-event outcomes. *HIV Working Group, Harvard T.H. Chan School of Public Health.* Boston, Massachusetts, USA, July 24, 2020.

9. **Weir IR**. Multivariate meta-analysis model for the difference in restricted mean survival times. *Division of Biostatistics, Harvard Pilgrim Health Care Institute Department of Population Medicine.* Boston, Massachusetts, USA, March 11, 2019.

10. **Weir IR**. Design of Non-Inferiority trials using the difference in Restricted Mean Survival Times. *Clinical Trials Working Group, Boston University School of Public Health.* Boston, Massachusetts, USA, November 17, 2017.

Last updated: January 3, 2021