

# Isabelle Weir, PhD

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## 1 Education and Training

**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

### 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

**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

**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

**2020** Society for Clinical Trials Scholarship Committee Member

**2018-Present** Society for Clinical Trials, member

**2017-Present** ENAR, member

**2014-Present** American Statistical Association, member

### Journal Review

Statistical reviewer for Journal of Clinical Oncology

Reviewer for Journal of Applied Statistics

### Leadership

**2017-2018** Biostatistics Student Association - 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-Estevéz 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, Tennessee, 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 presentations

8. **Weir IR**, Trinquart L. 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: March 11, 2020