Jordan Dworkin

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Contact

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Education

University of Pennsylvania, Philadelphia, PA — 2015 – 2020
    PhD in Biostatistics (*Advisor: Russell T. Shinohara, PhD*)
    MS in Biostatistics

Haverford College, Haverford, PA — 2011 – 2015
    BS in Psychology, High Honors
    Minor in Statistics, Minor in Mathematics

Awards

Young Investigator Travel Grant, ACTRIMS Congress	2018, 19
Finalist, Blavatnik Family Fellowship	2018
Student Poster Award, Statistical Methods in Imaging Conference	2018
Finalist, Best Poster Presentation, ACTRIMS Congress	2018
Young Investigator Travel Grant, ECTRIMS Congress	2016, 17
Magna Cum Laude, Haverford College	2015
Member Elect, Phi Beta Kappa Academic Honor Society	2015
David Olton '64 Award in Psychology, Haverford College	2015
Member Elect, Psi Chi International Honors Society in Psychology	2014

Scientific Memberships

North American Imaging in MS Cooperative	2017 – Present
Eastern North American Region of the International Biometric Society	2016 – Present
American Statistical Association	2015 – Present

Teaching

Teaching assistant

Statistics in Experimental Design and Analysis — 2017, 18
    University of Pennsylvania, Biomedical Graduate Studies

Experimental Methods and Statistics — 2013
    Bryn Mawr College, Department of Psychology

Guest lecturer

Programming and Computation for Biomedical Data Science — 2019
    University of Pennsylvania, Biostatistics Graduate Group

R Workshop for Incoming Students — 2017
    University of Pennsylvania, Biostatistics Graduate Group

Service

Reviewer
    Journal of Neuroimaging
    NeuroImage: Clinical
    Annals of Neurology

Committee member
    Student-Faculty Committee, *University of Pennsylvania*, Biostatistics Graduate Group
    Faculty Search Committee, *Haverford College*, Department of Psychology

Publications

Neuroimaging methods

[1]   **JD Dworkin**, KA Linn, TD Satterthwaite, A Raznahan, R Bakshi, RT Shinohara. A local group differences test for subject-level multivariate density neuroimaging outcomes. *Biostatistics.* 2020.

[2]   **JD Dworkin**, P Sati, AJ Solomon, D Pham, R Watts, ML Martin, D Ontaneda, MK Schindler, DS Reich, RT Shinohara. Automated integration of multi-modal MRI for the probabilistic detection of central vein sign in white-matter lesions. *American Journal of Neuroradiology*, 2018; 39 (10), 1806 – 1813.

[3]   **JD Dworkin**, KA Linn, I Oguz, GM Fleishman, R Bakshi, G Nair, PA Calabresi, RG Henry, J Oh, N Papinutto, D Pelletier, W Rooney, W Stern, NL Sicotte, DS Reich, RT Shinohara. An automated statistical technique for counting distinct multiple sclerosis lesions. *American Journal of Neuroradiology*, 2018; 39 (4), 626 – 633.

[4]   **JD Dworkin**, EM Sweeney, MK Schindler, S Chahin, DS Reich, RT Shinohara. PREVAIL: Predicting recovery through estimation and visualization of active and incident lesions. *NeuroImage: Clinical*, 2016; 12, 293 – 299.

Social science

[5]   **JD Dworkin**, KA Linn, E Teich, P Zurn, RT Shinohara, DS Bassett. The extent and drivers of gender imbalance in neuroscience reference lists. *Nature Neuroscience.* 2020.

[6]   **JD Dworkin**, RT Shinohara, DS Bassett. The emergent integrated network structure of scientific research. *PLoS One*, 2019; 14 (4), e0216146.

[7]   **JD Dworkin**. Network-driven differences in mobility and optimal transitions among automatable jobs. *Royal Society Open Science*, 2019; 6 (7), 182124.

[8]   **JD Dworkin**, RT Shinohara, DS Bassett. The landscape of *NeuroImage*-ing research. *NeuroImage*, 2018; 183, 872 – 883.

[9]   **JD Dworkin**, V Zimmerman, RJ Waldinger, MS Schulz. Capturing naturally occurring emotional suppression as it unfolds in couple interactions. *Emotion*, 2018; 19 (7), 1224 – 1235.

Other

[10] J Roy, KJ Lum, B Zeldow, **JD Dworkin**, VL Re, MJ Daniels. Bayesian nonparametric generative models for causal inference with missing at random covariates. *Biometrics*, 2018; 74 (4), 1193 – 1202.

[11] **JD Dworkin**, A McKeown, JT Farrar, I Gilron, M Hunsinger, RD Kerns, MP McDermott, BA Rappaport, DC Turk, RH Dworkin, JS Gewandter. Deficiencies in reporting of statistical methodology in recent randomized trials of nonpharmacologic pain treatments: ACTTION systematic review. *Journal of Clinical Epidemiology*, 2016; 72, 56 – 65.

[12] JS Gewandter, MP McDermott, A McKeown, **JD Dworkin**, SM Smith, RA Gross, M Hunsinger, AH Lin, BA Rappaport, ASC Rice, MC Rowbotham, MR Williams, DC Turk, RH Dworkin. Data interpretation in analgesic clinical trials with statistically non-significant primary analyses: An ACTTION systematic review. *Journal of Pain*, 2015; 16, 3 – 10.

Other Articles

JD Dworkin, P Zurn, DS Bassett. (In)citing action to realize an equitable future.
Neuron, 2020.

JD Dworkin, I Blinderman. Why the tech sector may not solve America's looming automation crisis.
The Pudding, 2018.

JD Dworkin. A statistical curiosity voyage through the emotion of Stranger Things.
FreeCodeCamp, 2017.

JD Dworkin. Could an alternative voting system have stopped Trump?
Towards Data Science, 2016.

| **Software &** | Who do you follow? R Shiny application, 2020. |
| **Programming** | |

mmdt. R package, 2019.

The landscape of neuroimaging research. R Shiny application, 2018.

Read, Act. Website and Google Chrome extension, 2017.

Presentations

Invited talks

2020 *Statistical techniques for addressing the clinico-radiological paradox in multiple sclerosis*
     Columbia University Biostatistics and Psychiatry Seminar, New York, NY

Statistical techniques for addressing the clinico-radiological paradox in multiple sclerosis
     Memorial Sloan Kettering Biostatistics Seminar, New York, NY

2019 *Advances in statistical methods for neuroimaging data analysis in multiple sclerosis*
     Haverford/Bryn Mawr Bi-College Math Colloquium, Philadelphia, PA

An automated probabilistic algorithm for the detection of central vein sign in multiple sclerosis
     Americas Committee for Treatment and Research in MS (ACTRIMS) Congress, Dallas, TX

2018 *An automated probabilistic algorithm for the detection of central vein sign in multiple sclerosis*
     Statistical Methods in Imaging (SMI) Conference, Philadelphia, PA

Contributed posters

2019 *A local group differences test for subject-level multivariate density neuroimaging outcomes*
     Joint Statistical Meetings (JSM), Denver, CO
     Organization for Human Brain Mapping (OHBM) Annual Meeting, Rome, Italy
     Eastern North American Region of the International Biometric Society (ENAR), Philadelphia, PA
Multi-modal MRI intensity distributions reveal differences across MS subtypes
     ACTRIMS Congress, Dallas, TX

2018 *Multi-modal MRI intensity distributions reveal differences across MS subtypes*
     European Committee for Treatment and Research in MS (ECTRIMS) Congress, Berlin, Germany
A local group differences test for subject-level multivariate density neuroimaging outcomes
     Joint Statistical Meetings, Vancouver, Canada
Distance-based tests for group differences in non-local processes on MRI
     ENAR Spring Meeting, Atlanta, GA
A fully automated statistical technique for counting pathologically distinct multiple sclerosis lesions
     ACTRIMS Congress, San Diego, CA

2017 *Statistical separation of spatially confluent but temporally distinct white matter lesions*
     ECTRIMS Congress, Paris, France
Predicting recovery through estimation and visualization of active and incident lesions
     SMI Conference, Pittsburgh, PA
     ENAR Spring Meeting, Washington, DC

2016 *Predicting recovery through estimation and visualization of active and incident lesions*
     North American Imaging in MS (NAIMS) General Meeting, Toronto, Canada
     ECTRIMS Congress, London, United Kingdom