Lee McDaniel

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Education

University of Wisconsin - Madison, Madison, WI
- Ph.D. Statistics, 2014, Advisor: Richard Chappell
- Dissertation: Additive Hazards in Non-Inferiority Trials

College of William and Mary, Williamsburg, VA
- M.S. Operations Research, 2008

Rose-Hulman Institute of Technology, Terre Haute, IN
- B.S. Mathematics and Economics, 2006

Employment

Louisiana State University
Assistant Professor, School of Public Health, Biostatistics — Sep. 2014 - Present

University of Wisconsin-Madison
Research Assistant, Department of Statistics — Aug. 2012 - Aug. 2014

University of Wisconsin-Madison
Trainee, Department of Statistics — Aug. 2008 - Aug. 2012

NASA Langley Research Center
Intern, Safety Critical Avionics Systems Branch — June 2007 - Aug. 2007

College of William and Mary
Teaching Assistant, Department of Mathematics — Aug. 2006 - May 2008

Research Interests

- Design and Analysis of Non-Inferiority Trials
- Outcome Dependent Sampling
- Statistical Computing in R
- Survival Analysis

Publications

1. M. D. LaFontaine, **L. S. McDaniel**, L. N. Kubicek, R. Chappell, L. J. Forrest, R. Jeraj. Fixed Effects Influencing the Variability of Distributed Parameter Based Models in DCE-CT Kinetic Analysis. Accepted to Veterinary and Comparative Oncology.

2. **L. S. McDaniel**, N. C. Henderson, and P. J. Rathouz. Fast Pure R Implementation of GEE: Application of the Matrix Package. The R Journal, 5(1):181-188, June 2013.

Manuscripts in Progress

1. **L. S. McDaniel**, J. S. Schildcrout, E. F. Schisterman and P J. Rathouz. Generalized Linear Models for Longitudinal Data with Biased Sampling Designs: A Sequential Offsetted Regressions Approach. Submitted.
2. R. Gertz, Y. Nikiforov, W. Rehrauer, **L. S. McDaniel**, R. Lloyd. Mutation in BRAF and other members of the MAPK pathway in papillary thyroid carcinoma in the pediatric population. Submitted.
3. **L. S. McDaniel**, M. Yu, and R. Chappell. Sample Size Under the Additive Hazards Model. Submitted.
4. **L. S. McDaniel**, M. Yu, and R. Chappell. Testing the Proportional Hazards Assumption Against an Additive Hazards Assumption. In preparation.

Presentations at National Meetings

1. **L. S. McDaniel**, P. J. Rathouz, and J. S. Schildcrout. Generalized Linear Models for Longitudinal Data with Biased Sampling Designs: A Sequential Offsetted Regression Approach. Joint Statistical Meetings, August 2015.
2. **L. S. McDaniel**. Sparse Matrix Computation in R with an Application to GEEs. Conference on Statistical Practice, February 2015.
3. **L. S. McDaniel**, M. Yu, and R. Chappell. Sample Size Under the Additive Hazards Model. Joint Statistical Meetings, August 2014.
4. **L. S. McDaniel**, M. Yu, and R. Chappell. Sample Size Under the Additive Hazards Model. The Annual Meeting of the Society for Clinical Trials, May 2014.
5. R. Chappell and **L. S. McDaniel**. Imbalanced Randomization in Non-inferiority Trials can be Highly Efficient. Eastern North American Region of the International Biometrics Society Meeting, March 2014.
6. P. J. Rathouz, **L. S. McDaniel**, and J. S. Schildcrout. Robust Outcome-Dependent Sampling for Continuous- and Counted-Response Longitudinal Data. Joint Statistical Meetings, August 2013.
7. P. J. Rathouz, J. S. Schildcrout, and **L. S. McDaniel**. Outcome Dependent Sampling for Continuous-Response Longitudinal Data. Eastern North American Region of the International Biometrics Society Meeting, March 2013.

Posters at National Meetings

1. **L. S. McDaniel**, M. Yu, and R. Chappell. Testing the Proportional Versus Additive Hazards Assumptions. May 2015.

Presentations at Regional Meetings

1. **L. S. McDaniel**, M. Yu, and R. Chappell. Sample Size Under the Additive Hazards Model. Meeting of the Louisiana Chapter of the ASA, May 2015.

Software

1. **L. S. McDaniel**, J. S. Schildcrout. SOR: Estimation using Sequential Offsetted Regression. Available on CRAN at `http://cran.r-project.org/web/packages/SOR/index.html`. September, 2014.
2. **L. S. McDaniel**. Interactive Sample Size Calculator. Available at `http://pages.stat.wisc.edu/~mcdaniel/samplesize.html`. November, 2013.
3. **L. S. McDaniel**, N. C. Henderson, P. J. Rathouz. geeM: Fit Generalized Estimating Equations. Available on CRAN at `http://cran.r-project.org/web/packages/geeM/index.html`. June, 2013.

Awards

- Travel Award, ASA Biometrics Section, 2015. Awarded for Generalized Linear Models for Longitudinal Data with Biased Sampling Designs: A Sequential Offsetted Regressions Approach.
- Finalist, Society for Clinical Trials Thomas Chalmers Student Paper Award, 2014. Awarded for Sample Size Under the Additive Hazards Model.
- Third Place, ASA Biopharmaceutical Student Paper Award, 2014. Awarded for Sample Size Under the Additive Hazards Model.
- Student Travel Award, INFORMS Annual Meeting, 2007.

Professional Membership

- Society for Clinical Trials
- American Statistical Association
- Eastern North American Region of the International Biometric Society

Miscellaneous

- Computer Skills: Strong knowledge of R, Stata, Java, Javascript, LaTeX, Microsoft Office.