Lee S McDaniel

School of Public Health LSU Health 2020 Gravier Street, 3rd Floor New Orleans, LA 70112 2604 Upperline St. New Orleans, LA 70115 (504) 327-9431 lmcda4@lsuhsc.edu

http://leemcdaniel.github.io

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

College of William and Mary

Teaching Assistant, Department of Mathematics Aug. 2006 - May 2008

Teaching

Course Director

BIOS 6304: Design of Experiments

BIOS 6212: Survival Analysis

BIOS 6300: Statistical Computing

BIOS 6314: Clinical Trial Methodology

Guest Lecturer

EPID 6226: Epidemiologic Design and Analysis EPID 7200: Advanced Epidemiologic Methods

MS Thesis Advisor

Patton Osborn, "Survival Analysis Application," 05/2017 – present.

Committee Member

Christie Watters, PhD committee member, 09/2014 – present.

Omar Aldibasi, PhD committee member, 09/2014 – present.

Yi Zhai, PhD committee member, 09/2014 - 05/2017.

Jacob Maronge, MS committee member, 09/2014 - 05/2016.

Husam Ardah, PhD committee member, 09/2014 - 04/2016.

RESEARCH INTERESTS

- Survival Analysis
- Clinical Trials
- Statistical Computing
- Electronic Health Records Analysis
- Generalized Estimating Equations
- Outcome Dependent Sampling

Publications

- L. S. McDaniel, W. J. Poynot, K. A. Gonthier, M. E. Dunham, T. W. Crosby. Image Based Three-Dimensional Characterization of Laryngotracheal Stenosis in Children. Accepted to OTO Open.
- 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. Archives of Pathology & Laboratory Medicine, 140(2):134-139, February 2016.
- **L. S. McDaniel**, M. Yu, and R. Chappell. Sample Size Under the Additive Hazards Model. Clinical Trials, 13(2):188-198, November 2015.
- 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.
- 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.

BOOK CHAPTERS

L. S. McDaniel, A. G. Glen, and L. M. Leemis. "Linear Approximations of Probability Density Functions." In *Computational Probability Applications*, Springer 2017. Editors: A. G. Glen and L. M. Leemis.

SOFTWARE

- 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.
- 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.

Submitted Papers

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 Regression Approach. Submitted to Statistical Methods in Medical Research.

PRESENTATIONS AT NATIONAL MEETINGS

- L. S. McDaniel. Additive Hazards Models in Clinical Trials. Lifetime Data Analysis Conference, May 2017.
- 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.
- L. S. McDaniel. Sparse Matrix Computation in R with an Application to GEEs. Conference on Statistical Practice, February 2015.
- L. S. McDaniel, M. Yu, and R. Chappell. Sample Size Under the Additive Hazards Model. Joint Statistical Meetings, August 2014.
- **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.
- 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.
- 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.
- 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

- L. S. McDaniel. Generating Survival Times to Simulate Additive Hazards Models. Meeting of the Society for Clinical Trials, May 2016.
- L. S. McDaniel, M. Yu, and R. Chappell. Testing the Proportional Versus Additive Hazards Assumptions. Meeting of the Society for Clinical Trials, May 2015.

Presentations at Regional Meetings

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.

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.

SERVICE ACTIVITY

- Bachelor of Science in Public Health steering committee, 01/2017 present.
- School of Public Health CEPH self study group, 01/2017 present.
- Society for Clinical Trials student paper committee, 12/2016 present.
- LSU Health graduate research day judge, 11/2016 present.
- Faculty Assembly secretary, 07/2016 present.
- Biostatistics qualifying exam committee, 05/2015 present.
- Biostatistics seminar organizer, 08/2015 12/2016.
- School of Public Health e-learning committee, 08/2015 present.
- Reviewer for:

PLOS ONE
The R Journal
Statistical Modelling
Statistics in Medicine
Biometrics

Professional Membership

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