

## Lauren N. Burns

---

### CONTACT INFORMATION

640 N. Broad St.  
Apt 734  
Philadelphia, PA 19130

*Phone:* (610) 248-3022  
*E-mail:* LBurns@temple.edu

### RESEARCH INTERESTS

Survival analysis, non-proportional hazards, microarray gene expression data analysis, high-dimensional data, dimension reduction.

### EDUCATION

**Temple University**, Philadelphia, Pennsylvania

Ph.D., Statistics, August 2017

- Co-Advisors: Cheng Yong Tang, Ph.D, and Karthik Devarajan, Ph.D. (Fox Chase Cancer Center)

M.S., Statistics, May 2013

**Muhlenberg College**, Allentown, Pennsylvania

B.S., Mathematics and Economics, May 2011

### ACADEMIC & TEACHING EXPERIENCE

**Temple University**, Philadelphia, Pennsylvania

*Assistant Professor*

**July 2017 - Present**

*Instructor*

**January 2016 - June 2017**

*Graduate Student*

**August 2011 - August 2017**

Includes Ph.D. and Masters level coursework.

- Teaching Assistant: Business Calculus (7 semesters); Primary Instructor for Business Statistics (multiple semesters).
- Related Coursework: Probability and Statistical Theory I, II; Statistical Methods I, II, III; Mathematics for Statistics; Advanced SAS Programming; Bayesian Genetics; Clinical Trials; Data Mining; Stochastic Processes; Advanced Statistical Inference I and II; Statistical Computing; Applied Multivariate Analysis.

*Research Assistant*

**August 2013 - May 2017**

Consultant for the Center for Statistical Analysis, where I manage data, conduct analyses, and create reports for various research projects.

- Worked with the U.S. State Department on a project analyzing drug use in Afghanistan.
- Worked with faculty from the MIS department on a project using PLS Path Modeling to study the complex relationship between general and technological self-efficacy, civic engagement and entrepreneurial intentions in students.

### PUBLICATIONS

- Das, K., Afriyie, P., Spirko, L. "A Semiparametric Bayesian Approach for Analyzing Longitudinal Data from Multiple Related Groups". *International Journal of Biostatistics*, 2015.
- Spirko-Burns L., Devarajan K. "Unified methods for feature selection in large-scale genomic studies with censored survival outcomes." *Bioinformatics*. 2020; 36(11): 3409-3417.
- Spirko-Burns L., Devarajan K. (In Press) "Supervised dimension reduction for large-scale 'omics' data with censored survival outcomes under possible non-

proportional hazards” [published online ahead of print, 2020 Jan 10]. *IEEE/ACM Trans Comput Biol Bioinform.* 2020; doi:10.1109/TCBB.2020.2965934.

CONFERENCE  
PRESENTATIONS

- “Unified Methods for Variable Selection in Large-Scale Genomic Studies with Censored Survival Outcomes,” Joint Statistical Meetings, Baltimore MD, July 2017.
- “Supervised Dimension Reduction for Large-Scale Genomic Data with Censored Survival Outcomes Under Possible Non-proportional Hazards,” Joint Statistical Meetings, Vancouver, July 2018.
- “Methods for Handling Correlated Covariates in Integrative Genomics Analysis,” Joint Statistical Meetings, Denver, July 2019.

HONORS AND  
AWARDS

- 2020 Faculty Award, Tokyo EMBA Program
- Faculty of the Program Award, MSBA program (2020)
- CAFSBM Award for Excellence in Teaching by a Doctoral Student (2013).
- JSM 2017 Student Paper Award, Section on Statistical Learning and Data Science.
- FSBM PhD Research Competition - First Place (October 2017).

TEACHING  
EXPERIENCE

Temple University, Philadelphia, PA

**August 2011 - Present**

- Undergraduate Courses: STAT 1001 Quantitative Methods for Business I; STAT 1102 Quantitative Methods for Business II; STAT 1902 Honors Quantitative Methods for Business II; STAT 2103 Statistical Business Analytics; STAT 0827 Statistical Reasoning and Games of Chance.
- Graduate Level Courses: STAT 5401 Foundations for Data Analytics; STAT 5001 Quantitative Methods for Business; STAT 5607 Advanced Business Analytics; STAT 5801 Statistical Analysis for Management.

Lasalle University, Philadelphia, PA

**August 2013 - December 2015**

- Adjunct Instructor: Intermediate Algebra and Applied Business Calculus

Delaware County Community College, Media, PA

**May 2013 - July 2015**

- Adjunct Instructor: Intermediate Algebra, Modern College Mathematics, Intro to Stat and Prob, Statistics I

COMPUTER SKILLS

- Statistical Software: R; some experience with SAS.
- Languages: Python, some use of Linux shell scripts.