DAVID S BURTON

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Saunders Research Building, 265 Crittenden Blvd. Box 630, Rochester, NY, 14642

EDUCATION

UNIVERSITY OF ROCHESTER SMD, Rochester, NY — Present
PhD Student in Dept. of Biostatistics and Computational Biology

UNIVERSITY OF ROCHESTER SMD, Rochester, NY — 2018
MA in Statistics

EAST TENNESSEE STATE UNIVERSITY, Johnson City, TN — 2016
BS in Mathematics, Statistics Concentration
BA in Economics
Member of Kappa Mu Epsilon Mathematics Honor Society

HONORS AND AWARDS

- BioC 2020 Travel Scholarship Award — 2020
- BioC 2019 Travel Scholarship Award — 2019
- UpStat 2019 Best Student Methodology and Theory Presentation, Honorable Mention — 2019
- UpStat 2018 Data Analytics Competition Gold Medal — 2018
- NSF S-STEM Scholar — 2016
- ETSU Gordon Ludolf Economics Scholar — 2015

RESEARCH AND SCHOLARLY ACTIVITIES

- NIH T32 Environmental Health Trainee — Present
- Member, McCall Statistical Genomics Lab — Present
- Team Captain, UpStat 2018 Data Analytics Competition Winning Team — 2018
- SAMSI: Undergraduate Workshop, Astrostatistics — 2016
- UConn Health REU: Modeling and Simulation in Systems Biology — 2016

PUBLICATIONS

1. Sanchez F, Barboza L, **Burton DS**, Cintron-Arias A (2018). Comparative analysis of dengue versus chikungunya outbreaks in Costa Rica. Ricerche di Matematica. 67(1): 163-174.

TALKS

1. BioC North America 2020, Virtual/Boston, MA. *Mixture Modeling for Genetic Regulatory Networksfrom Single Perturbation Gene Expression Experiments.* 2020.

2. University of Rochester PhD Workshop, Rochester, NY. *Genetic Regulatory Network Inference for Gene Expression Data in Perturbation Experiments.* 2020.

3. JSM 2019, Denver,CO. *Likelihood based mixture modeling of genetic regulatory networks.* 2019.

4. UpStat 2019, Rochester, NY. *Likelihood based mixture modeling of genetic regulatory networks.* 2019.

5. University of Rochester School of Medicine and Dentistry Visit Weekend, Rochester, NY. *Likelihood based mixture modeling of genetic regulatory networks.* 2019.

6. University of Rochester Biostatistics Dept. Seminar Series, Rochester, NY. *It's Nice to have Options: Reviewing Genetic Regulatory Network Inference Methods.* 2019

7. UpStat 2018, Rochester, NY. *A brief history of crime in Rochester, NY.* 2018.

8. SoCon Undergraduate Research Forum, Spartanburg, SC. *Functional Data Analysis of Copy Number Alterations in Bladder Cancer Tumor Chromosomes.* 2016.

9. Boland Undergraduate Research Forum, Johnson City, TN. *Effect of the Affordable Care Act on Uncompensated Care in Hospitals.* 2016.

POSTERS

1. JSM 2019, Denver,CO. *Likelihood Based Mixture Modeling of Genetic Regulatory Networks.* 2019.

2. BioC North America 2019, New York City, NY. *Likelihood Based Mixture Modeling in Gene Regulatory Network Inference.* 2019.

3. UNYTE Translational Genomics and Proteomics Un-Meeting. *Incorporating uncertainty in a ternary gene regulatory network model.* 2019.

4. Wilmot Cancer Institute (WCI) Scientific Symposium 2018, Rochester, NY. *Incorporating uncertainty in a ternary gene regulatory network model.* 2018.

5. BioC 2018, Toronto, Ontario, Canada. *Incorporating uncertainty in a ternary gene regulatory network model.* 2018.

6. URMC Graduate Student Society Poster Session, Rochester, NY. *Incorporating uncertainty in a ternary gene regulatory network model.* 2018.

7. JMM Undergraduate Poster Session, Atlanta, GA. *Functional Data Analysis of Copy Number Alterations in Bladder Cancer Tumor Chromosomes.* 2017.

8. UConn Health Summer Poster Session, Farmington, CT. *Functional Data Analysis of Copy Number Alterations in Bladder Cancer Tumor Chromosomes.* 2016.

R/BIOCONDUCTOR PACKAGES

ternarynet   Computational Bayesian approach to ternary network estimation

EXPERIENCE

URMC SMD Post-baccalaureate Research Education Program   Summer 2019
Guest Lecturer, Basic Statistical Tests and Assumption Verification in R   *Rochester, NY*

UR Dept. of Biostatistics   Fall 2018
Teaching Assistant, Applied Linear Regression   *Rochester, NY*

UR STEM For All   June 2018
Teaching Assistant, summer research program in statistical machine learning   *Rochester, NY*

UR Dept. of Biostatistics   Fall 2017
Teaching Assistant, Applied Linear Regression   *Rochester, NY*

ETSU Dept. of Mathematics and Statistics   Spring 2017
Teaching Assistant, Partial Differential Equations and Intro to Statistics   *Johnson City, TN*

ETSU NSF-SSTEM Fall 2016

Teaching Assistant, Preparation of Data Driven Mathematical Scientists *Johnson City, TN*

UConn Health REU Summer 2016

Research Assistant *Farmington, CT*