### Suzanne M. Thornton

Contact 500 College Ave *Voice:* (610) 690-6857

Information Department of Mathematics & Statistics E-mail: sthornt1@swarthmore.edu

Swarthmore College http://www.swarthmore.edu/suzanne-thornton

Swarthmore, PA 19081 USA

Research Statistical computing, foundations of statistical inference, ethical statistical practice, science com-

Interests munication.

EDUCATION Rutgers, The State University of New Jersey, Piscataway, New Jersey USA

Ph.D. Statistics, October 2019

Thesis: Advanced computing methods for statistical inference

University of Florida Suma Cum Laude, Gainesville, Florida USA

B.S., Statistics, May, 2014B.S., Mathematics, May, 2014

PEER REVIEWED Approximate confidence distribution computing.

PUBLICATIONS Thornton Suzanne, Wentao Li, and Minge Xie. N Engl J Stat Data Sci. (submitted)

Bridging Bayesian, frequentist and fiducial inferences using confidence distribution. (2022+) **Thornton**, Suzanne. and Xie, Minge. In *Handbook on Bayesian*, Fiducial and Frequentist (BFF)

Inferences. (co-editors: Berger, J.O., Meng, X.L., Reid, N. & Xie, M.) Chapman & Hall, New York. (forthcoming)

(2022)

(forthcoming)

Development and validation of a predictive model of drug-resistant genetic generalized epilepsy. (2020) Hyunmi Choi, MD, MS, Kamil Detyniecki, MD, Carl Bazil, MD, PhD, Suzanne **Thornton**, PhD, et mult. al. Neurology.

Exact Inference on the Random-Effects Model for Meta-Analysis with Few Studies. (2019)

Haben Michael, Suzanne **Thornton**, Minge Xie, and Lu Tian. *Biometrics*.

Publications The JEDI Corner (June 2022)

Thornton, Suzanne. AMSTAT News.

Towards best practices for collecting gender and sex data. (Feb 2022)

**Thornton** Suzanne, Dooti Roy, Stephen Parry, Donna LaLonde, Wendy Martinez, Renee Ellis, David Corliss. *Significance Magazine*.

Friends and allies: LGBT+ inclusion in statistics and data science. (June 2019)

Thornton Suzanne, Brittany Green, and Emma Benn. Significance Magazine.

LGBT+ resources for statisticians and data scientists. (May 2019)

LaLonde Donna, Wendy Martinez, Jack Miller, Miles Ott, and Suzanne **Thornton**. Significance

Magazine Online.

HONORS AND Spencer Large Research Grant<sup>1</sup> (applied) 2022

AWARDS (SELECTED) Dubai Cares and INEE E-Cubed Grant<sup>1</sup> (applied) 2021

LANG Center Faculty-led Engaged Research Grants 2021, 2022

Nominated for National Advisory Committee on Racial, Ethnic, and Other Populations (U.S. Census Bureau)

2022

| Rutgers Presidential Fellowship       | 2015-2019  |
|---------------------------------------|------------|
| ICSA Student Paper Winner             | 2018       |
| Rutgers Professional Development Fund | 2017, 2018 |
| NESS Student Paper Winner             | 2017       |
| Deming Scholar Award                  | 2016       |
| Rutgers Excellence Fellowship         | 2015       |

## Presentations (selected)

Topic Contributed Speaker. Sex and gender: Data quality and ethical considerations for statistical analyses. Joint Statistical Meeting. Washington, D.C. August 2022

Invited panelist. Facing Organizational and Ethical Considerations Resulting from COVID-19. Conference on Statistical Practice. Virtual, February 2021

Topic contributed panelist. Balderdash, Codswallop, and Malarkey. Joint Statistical Meeting. Virtual, August 2020.

Invited speaker. Statistical computing with confidence distributions. Villanova University, Villanova, PA, December, 2019.

Invited speaker. Statistical computing with confidence distributions. Icahn School of Medicine at Mount Sinai, New York City, NY, April, 2019.

Topic contributed panelist & organizer. Conference Within a Conference: A Forum for Sharing a Research and Education Agenda. Women in Statistics and Data Science Conference. Bellevue, WA, October, 2019.

Topic contributed panelist & organizer. Changing the Statistics Community: Effective Strategies for Promoting an Inclusive and Equitable Culture for Women. Joint Statistical Meeting. Denver, CO, August, 2019.

Topic contributed panelist & organizer. Preparing for Increased Gender Diversity and Inclusion in Statistics and Data Science: Important Perspectives from Gender Non-Conforming and LGBTQ Scholars. Women in Statistics and Data Science Conference. La Jolla, CA, October, 2018.

Session speaker. Approximate Confidence Distribution Computing. Joint Conference on Biometrics & Biopharmaceutical Statistics, Vienna, Austria, September, 2017.

Invited poster. Introducing Approximate Confidence Distribution Computing. 72nd Annual Deming Conference on Applied Statistics, Atlantic City, NJ, December, 2016.

Invited speaker. Introduction to Common Statistical Methods. Rutgers Center for Cell Biology and Neuroscience Weekly Seminar, Piscataway, NJ, 2016.

Poster presentation. Approximate Confidence Distribution Computing. Third Annual Bayesian, Frequentist, Fiducial Workshop, Piscataway, NJ, 2016.

### EDUCATIONAL EXPERIENCE

#### Teaching

Developed and evaluated coursework, delivered lessons, and mentored students.

# Statistical Methods I Swarthmore College (S'20, F'21)

Strengthening Conceptual Understanding in Introductory Statistics Courses

DANA Center at University of Texas Austin

(S'21, S'22)

Statistical Methods II

(F'20, F'19, S'21, S'22)

Swarthmore College

 ${\bf Regression~Analysis~(combined~graduate/undergraduate)}$ 

(F'17, S'15)

Rutgers University

Undergraduate Research and Advising

 $QSIDE\ Datathon 4 Justice$ 

Fall 2021

Faculty participant

Swarthmore College

 $Math/Stat\ minor\ Advisor$ 

2020 - 2021

Student research mentoring

1. Shikha Shrestra

Summer 2022

LANG Center Faculty-led Engaged Research Assistant

2. Harron Mwanqanqi Kalii

2021 - 2022

Education in Conflict Research Group<sup>1</sup>

3. Nancy Vu

2021-2022

Education in Conflict Grant Proposal Research Group<sup>1</sup>

4. Nancy Vu

Summer 2021

LANG Center Faculty-led Engaged Research Assistant Sigma-Xi Poster Presentation

5. Xoe Porterfield

Summer 2019

Guided lit review for survey methodology for gender and sex minorities

### Miscellaneous

Intercultural Center Cultural Competency Workshop

2020

Swarthmore College

Advocating for Students of Color: There's More You Can Do

2021

American Mathematical Society

Statistical Consultant (part-time)

2015 - 2019

Rutgers University

Professional Service

General

**Education Council Officer** 

August, 2020 - Present

ISOSTAT representative

<sup>&</sup>lt;sup>1</sup>Interdisciplinary research with Prof. Amy Kapit of Peace and Conflict Studies.

USPROC Judge February 2020

Project evaluator

**International Mathematical Statistics Association** 

Spring, 2021

Watercooler chat participant

Justice, Equity, Diversity, and Inclusion (JEDI) Organizing Group, American Statistical Association

August, 2020 - Present

Communications Committee Chair

Presidential initiative working group, American Statistical Association

2020

Leader and organizer

LGBT+ Diversity Town Hall, Joint Statistical Meeting

August, 2019

Leader and organizer.

### Swarthmore

Swatisticians Coffee Hour Spring 2021
Colloquium chair 2021-2022
Hiring committee Spring 2020 - Present
Faculty advisor for Gender Minorities in Math/Stats (GeMs) 2020-2021
LACOL Faculty Advisory Council 2020 - 2022
Math/Stat Placement Committee Summer 2020

## Rutgers

Graduate Student Association (GSA) Vice President
University Senate, Graduate Student Representative
September, 2017 - May, 2018
September, 2016 - May, 2017

Professional Associations

- Institute for the Quantitative Study of Inclusion, Diversity, and Equity (QSIDE)
- International Mathematical Statistics Association (IMS)
- American Statistical Association (ASA)

Computer Skills

- Statistical Packages: R (including parallel, tidyverse, RMarkdown), SAS, Minitab, SPSS
- Languages: C++, Markdown, Python.
- Applications: LATEX, spreadsheet.
- Operating Systems: Mac, Windows.