

KAITLYN G. FITZGERALD

October 2022

Department of Mathematics, Physics, & Statistics
Azusa Pacific University

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APPOINTMENTS

2021 – **Assistant Professor**, Department of Mathematics, Physics, & Statistics,
Azusa Pacific University, Azusa, CA

EDUCATION

2021 **Ph.D. Statistics**, Northwestern University, Evanston, IL
Dissertation: *Methods for Synthesizing and Translating Statistical Evidence in Education*
Committee: Elizabeth Tipton (*chair*), Larry Hedges, Steven Franconeri
Certificate in Teaching, Searle Center for Advancing Learning & Teaching

2018 **M.S. Statistics**, Northwestern University, Evanston, IL

2015 **B.S. Mathematics**, Olivet Nazarene University, Bourbonnais, IL
Summa cum laude, University Honors Program Graduate

FELLOWSHIPS, HONORS & AWARDS

2022 – 2023 Project NExT Fellow, Mathematical Association of America

2021 Young Alumni Award, Olivet Nazarene University

2020 – 2021; University Fellowship, Northwestern University

2016 – 2017

2017 – 2020 Multi-disciplinary Program in Education Sciences (MPES) Fellowship,
U.S. Department of Education, Institute of Education Sciences.

2015 Award for Excellence and Meritorious Work in Mathematics,
Olivet Nazarene University (*top departmental award*)

TEACHING

Azusa Pacific University, Department of Mathematics, Physics, & Statistics

2021 - Courses taught:

MATH 130: Introduction to Statistics (*F21, S22, F22*)

MATH 250: Data Analysis (*F22*)

PRMA 130: Introduction to Statistics (F21)
 MATH 361: Probability & Statistics I (F21, S22)
 MATH 362: Mathematical Statistics (F22)
 STAT 511: Applied Regression Analysis (S22)

Northwestern University

2018 – 2020 **Instructor & Course Designer**, Northwestern Prison Education Program,
 Cook County Department of Corrections
 Introduction to Social Statistics and Data Literacy (*Summer 2019*)
Curriculum Development Graduate Assistant, Department of Statistics
 STAT 202: Introduction to Statistics (*Summer, Fall 2019*)
Coordinated Learning Team (CLT) Instructor, Department of Athletics
 MATH 220: Differential Calculus of One Variable Functions (*Winter 2019*)
 PSYCH 201: Statistical Methods in Psychology (*Summer 2019*)
 STAT 202: Introduction to Statistics (*Winter, Spring, Summer 2019*)
Teaching Assistant, Department of Statistics
 STAT 202: Introduction to Statistics (*Fall 2019*)
 STAT 330: Applied Statistics for Research (*Fall 2018*)

MENTORING & ADVISING

2022 – **Undergraduate Research Mentor**, CalSpace Grant, Azusa Pacific University
 2021 – **Learning Assistant Mentor**, Azusa Pacific University
 2020 – 2021 **Graduate Teaching Mentor**, Teaching Certificate Program, Northwestern
 University Searle Center for Advancing Learning and Teaching
 2019 – 2020 **AP Research Expert Advisor**, James B. Conant High School

PUBLICATIONS

2022 **Fitzgerald, K.G.**, & Tipton, E. The Meta-Analytic Rain Cloud Plot: A New
 Approach to Visualizing Clearinghouse Data. Forthcoming in *Journal for
 Research on Educational Effectiveness*. DOI: 10.1080/19345747.2022.2031366
 2021 Schauer, J.M., **Fitzgerald, K.G.**, Peko-Spicer, S., Whalen, M.C.R., Zejnullahi, R.,
 & Hedges, L.V. An evaluation of statistical methods for aggregate patterns of
 replication failure. *Annals of Applied Statistics*, 15(1), 208-229.

- 2021 Tipton, E., Spybrook, J., **Fitzgerald, K.G.**, Wang, Q., Davidson, C. Towards a System of Evidence for All: Current Practices and Future Opportunities in 37 Randomized Trials. *Educational Researcher*, 50(3), 145 – 156.
- 2019 Miller, J.D., **Fitzgerald, K.G.**, Smith, A.L., & Young, S.L. Geophagy among a cohort of Kenyan women with mixed HIV status: a longitudinal analysis. *American Journal of Tropical Medicine & Hygiene*, 101(3), 654 – 660.

WORKING PAPERS AND BOOKS

- 2022 **Fitzgerald, K.G.** Using Extant Data to Improve Estimation of the Standardized Mean Difference. Revise & resubmit.
- 2022 **Fitzgerald, K.G.**, & Tipton, E. A knowledge mobilization framework: Towards more evidence-based statistical communication practices in education research. Revise & resubmit.
- 2019 Ismay, C., Kim, A.Y., Kuyper, A.M., Tipton, E. & **Fitzgerald, K.G.** Introduction to Statistics and Data Science: A modern dive into R and the tidyverse. <https://nustat.github.io/intro-stat-ds/>

CONFERENCE PRESENTATIONS & INVITED TALKS

- 2022 **Fitzgerald, K.G.** & Tipton, E. The Meta-Analytic Rain Cloud Plot: A New Approach to Visualizing Clearinghouse Data. Paper presentation at Society for Research Synthesis Methodology Annual Meeting, Portland, OR, July 2022.
- 2022 **Fitzgerald, K.G.** Data visualization tips and tricks: Teaching and learning how to be better communicators of data. Oral presentation at Association of Christians in the Mathematical Sciences bi-annual conference, Azusa Pacific University, June 2022.
- 2021 **Fitzgerald, K.G.** How statistics helps us be better stewards of information: Applications from social policy & global development. Invited talk at Olivet Nazarene University, Department of Mathematics, October 2021.
- 2021 **Fitzgerald, K.G.** Effective communication of meta-analytic data in education: Evidence from a statistical cognition experiment on data visualizations. Poster presentation at STEM Research Symposium, Azusa Pacific University, October 2021.

- 2021 **Fitzgerald, K.G.** & Tipton, E. Communicating clearinghouse data: A statistical cognition experiment on education practitioners' understanding of forest plots. Paper presentation at the Society for Research on Educational Effectiveness (SREE) annual conference, virtual, September 2021.
- 2020 Hill, A., Kolak, M., **Fitzgerald, K.** InspiRing InstRuction: A panel on teaching #rstats for all audiences. Invited panelist, R-Ladies Chicago event, November 2020.
- 2020 **Fitzgerald, K.** Adjusting standard deviations for homogeneity of samples. Poster presentation at the Society for Research on Educational Effectiveness (SREE) annual conference, March 2020. (Cancelled due to COVID-19).
- 2019 **Fitzgerald, K.** What are we 95% confident about anyway? A software-embedded curriculum for learning statistical inference. Presentation at Association of Christians in the Mathematical Sciences bi-annual conference, Indiana Wesleyan University, May 2019.
- 2018 **Fitzgerald, K.** Statistics for Social Good: Why your math degree is in demand in social policy and international development. Invited talk at Olivet Nazarene University, Department of Mathematics, October 2018.
- 2018 Blaushild, N., **Fitzgerald, K.**, & Kamel, A. Does AIT improve student outcomes? An analysis of referrals, attendance, and grades. Presented to stakeholders at Evanston Township High School, May 2018.

RESEARCH & CONSULTING

- 2022 **External evaluator**, NSF Grant: Improving Evaluations of R&D in STEM Education Summer Institute, Northwestern University
- 2022 **External evaluator**, NSF Grant: Modern Meta-Analysis Research Institute, Georgia State University
- 2019 – 2021 **Lab member**, Statistics for Evidence-Based Policy and Practice (STEPP) Center, Northwestern University
- 2019 **Graduate Assistant**, Meta-Analysis Training Institute, Loyola University
- 2018 – 2019 **Consultant / Facilitator**, IES Summer Training Institute: Cluster Randomized Trials, Northwestern University

- 2018 – 2019 **Statistical Consultant**, Young Research Group, Northwestern University
- 2017 – 2021 **Graduate Research Assistant**, Institute for Policy Research, Northwestern University
- 2015 – 2016 **Research Analyst**, Barna Group, Ventura, CA

LEADERSHIP & SERVICE

University Leadership & Service

- 2022 - **General Education Assessment Committee**, Azusa Pacific University
- 2022 – 2023 **Faculty Learning Community: Faith Integration & Race/Ethnicity**, Azusa Pacific University

Departmental Leadership & Service

- 2022 - **Recruitment Task Force**, Azusa Pacific University
- 2022 - **Data Science Minor Coordinator**, Azusa Pacific University
- 2021 - **Introduction to Statistics Coordinator**, Azusa Pacific University
- 2019 – 2020 **Speaker Series Coordinator**, STEPP Center, Northwestern University

Referee service

- Journals: *Journal of the Association of Christians in the Mathematical Sciences*
 Journal of Research on Educational Effectiveness
 Journal of Statistics and Data Science Education
- Conferences: *Research Methods Section, Society for Research on Educational Effectiveness*

Professional Society Membership

- American Statistical Association (ASA)
- Association of Christians in the Mathematical Sciences (ACMS)
- Mathematical Association of America (MAA)
- Society for Research on Educational Effectiveness (SREE)
- Society for Research Synthesis Methodology (SRSM)

Volunteer mentoring, judging, & consulting

- 2022 **Judge**, Undergraduate Student Project Competition (USPROC), Consortium for the Advancement of Undergraduate Statistics Education (CAUSE) & The American Statistical Association (ASA)
- 2022 **Judge**, STEM Research Symposium, Azusa Pacific University
- 2020 – 2021 **Correspondence Tutor**, Northwestern Prison Education Program
- 2018 **Volunteer Statistical Consultant**, First Presbyterian Church of Evanston

Community Leadership & Service

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| 2018 – 2020 | Small Group Leader , NU Graduate Christian Fellowship |
| 2017 – 2019 | Small Group Coordinator , NU Graduate Christian Fellowship |
| 2019 | Stewardship Task Force , First Presbyterian Church of Evanston |
| 2018 | Panelist , InterVarsity Ethnic Reconciliation and Justice National Consultation, University of Chicago, May 2018 |