KAITLYN G. FITZGERALD
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Department of Mathematics, Physics, & Statistics   kfitzgerald@apu.edu
Azusa Pacific University   katie-fitzgerald.netlify.app

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

2023 – 2024   Faculty Fellow, Jr. Faculty Mentoring Program, Azusa Pacific University

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*)

GRANT FUNDING

2023 – 2025   **Co-Principal Investigator,** HSI Pilot Project: Impact of Learning Assistants on
                STEM Identity for Students Historically Underrepresented in STEM. National
                Science Foundation, with Bradley McCoy (PI) and Elijah Roth (Co-PI). Award
                Number: 2247670. Funding: $199,991.

2023 – 2024   **Principal Investigator**, Statistical cognition and visualization of meta-analytic data for education research. Faculty Research Council Grant, Azusa Pacific University. Funding: $6,000.

TEACHING

Azusa Pacific University, Department of Mathematics, Physics, & Statistics
2021 -   Courses taught:
> MATH 130: Introduction to Statistics *(F21, S22, F22, S23, F23)*
> MATH 250: Data Analysis *(F22, F23)*
> MATH 361: Probability & Statistics I *(F21, S22, S23)*
> MATH 362: Mathematical Statistics *(F22)*
> PRMA 130: Introduction to Statistics *(F21, F23)*
> STAT 511: Applied Regression Analysis *(S22, S23)*

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)*

PUBLICATIONS

2023   **Fitzgerald, K.G.**, & Tipton, E. A knowledge mobilization framework: Towards more evidence-based statistical communication practices in education research. *Journal for Research on Educational Effectiveness.* *https://doi.org/10.1080/19345747.2023.2209082*

2022   **Fitzgerald, K.G.,** & Tipton, E. The Meta-Analytic Rain Cloud Plot: A New Approach to Visualizing Clearinghouse Data. *Journal for Research on Educational Effectiveness,* 15:4, 848-875

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.

2019   Ismay, C., Kim, A.Y., Kuyper, A.M., Tipton, E. & **Fitzgerald, K.G.** Introduction to Statistics and Data Science: A moderndive into R and the tidyverse. https://nustat.github.io/intro-stat-ds/

CONFERENCE PRESENTATIONS & INVITED TALKS

2023   **Fitzgerald, K.G.** & Tipton, E. A knowledge mobilization framework: Towards more evidence-based statistical communication practices in education research. Oral presentation at Society for Research on Educational Effectiveness (SREE) annual conference, Arlington, VA, September 2023.

2023   **Fitzgerald, K.G.** Data visualization activities to illuminate cognitive pitfalls and help students become better communicators of data. Oral presentation at MathFest, Tampa, FL, August 2023.

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.

MENTORING & ADVISING

2022 –	**Undergraduate Research Mentor**, Azusa Pacific University
	Summer – Fall 2023 Project (2 students): Statistical cognition and visualization of meta-analytic data for education research.

Charles, A., Khella, D., Fitzgerald K.G. Effective data visualizations for large meta-analyses: Evidence from a statistical cognition experiment. STEM Research Symposium, Azusa Pacific University, September 2023.

Fall 2022 – Spring 2023 Project (2 students): APU STEM Retention & Student Performance. Conference presentations:

dePillis-Lindheim, A., Gottry, E., **Fitzgerald, K**. STEM Retention and Academic Learning Communities. Poster presentation at Mathematical Association of America SoCal-Nev Section Meeting, University of La Verne, April 2023.

dePillis-Lindheim, A., Gottry, E., **Fitzgerald, K**. Analysis of STEM Retention and Gatekeeping Introductory Courses. Poster presentation at The Undergraduate Student Project Competition, Consortium for Undergraduate Statistics Education, November 2022.

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

RESEARCH & CONSULTING

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 -	**Data Science Minor Coordinator**, Azusa Pacific University
2021 -	**Introduction to Statistics Coordinator**, Azusa Pacific University
2022 – 2023	**Math & Physics Fellowship Task Force**, Azusa Pacific University
2022 – 2023	**Recruitment Task Force**, 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
	Problems, Resources, and Issues in Mathematics Undergraduate Studies
Conferences:	*Association of Christians in the Mathematical Sciences*
	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

2023	**Judge,** Association of Christian Schools International (ACSI) virtual middle school science fair
2022, 2023	**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

2023 –	**Usher & Greeter,** Church of the Resurrection Los Angeles	
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	