

Melanie N. Mayer

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Date of Preparation: January 15, 2021

Education

- Expected 2023 Mailman School of Public Health, Columbia University, New York, NY
Department of Biostatistics
Doctoral Candidate
- December 2017 University of Florida, Gainesville, FL
Bachelor of Science in Statistics
Bachelor of Arts in Economics
Minor in Actuarial Science
GPA: 3.89/4.0

Academic Appointments

- August 2018 - Present Department of Biostatistics, Columbia University, Research Assistant
o Supervisor: Dr. Linda Valeri
o Research areas: Causal inference methods, external validity, health disparities, environmental mixtures
- August 2018 - August 2020 Mailman School of Public Health, Columbia University, Initiative for Maximizing Student Development (IMSD) Program, Graduate Research Assistant

Teaching Experience

Teaching Assistant

- Spring 2021 Statistical Inference, Biostatistics Department, Columbia University
- Fall 2020 Statistical Methods for Causal Inference, Biostatistics Department, Columbia University
- Summer 2019 Introduction to Biostatistics, Biostatistics Epidemiology Summer Training (BEST) Program, Biostatistics Department, Columbia University

Workshops

- July 2019/July 2020 Causal Mediation Analysis Training Boot Camp, Environmental Health Department, Columbia University, Course Guide
- January 2020 R Markdown and Interactive Dashboards Workshop, RStudio::conf, Teaching Assistant
- March 2019 Exxon Mobil Annual Team Training, Data Analysis Workshop, Leader

Experience

- February 2018 - June 2018 **Techo-Chile** Centro de Investigación Social (CIS), Santiago, Chile
- Collaborated with the team responsible for providing all analytical reports needed within the 5 sectors of the company
 - Analyzed variables across slums such as overcrowding and precarious material to formalize an approach for selecting future slums in which to build houses
 - Evaluated data of previously selected families living in slums for whom houses were built to see if requirements were upheld
- June 2017 - June 2018 **MIT Abdul Latif Jameel Poverty Action Lab (JPAL)** Education Sector Intern, Cambridge, MA
- Defined the curriculum of the Micromasters in Data, Economics, and Development Policy offered by MIT and JPAL
 - Improved the material/topics presented in the course "Data Analysis for Social Scientist" and serve as a teacher's assistant for 20,000+ students
 - Ran statistical analyses on past students' demographics and performances to improve program accessibility worldwide and retention rates
- May 2016 - August 2016 **Columbia University Mailman School of Public Health** Research Intern, New York, NY
- Researched transferability of motor skills from one side of the body to the other under Dr. Jeff Goldsmith
 - Learned biostatistical methods in a rigorous classroom setting and applied them to lab research under the Biostatistics Epidemiology Summer Training (BEST) program
 - Acquired statistical programming skills in R and SAS, and applied skills to data from lab
- January 2017 - December 2017 **HealthStreet** Data Management Volunteer, Gainesville, FL
- Managed data from surveys gathered around the Gainesville community and other districts in Florida
 - Reviewed already-inputted data for quality control procedures
 - Helped create weekly newsletters to update all staff by creating graphics through SAS using our data pool

Leadership

- August 2019 - Present **Graduate Student Research Seminar (GSRS) Series** Chair, New York, NY
- Organize monthly presentations to disseminate new/current research being done within the department
 - Provide a platform for biostatistics doctoral students and post-docs to practice presenting their ongoing work and obtain feedback from their peers

- January 2016 - December 2017 **Latin STEM Fair** High School Outreach Chair, Gainesville, FL
- o Organized annual fair for over 400 people to spread STEM interest amongst Latinos in the Gainesville Community
 - o Presented career options within STEM to high school students to increase interest
 - o Motivated and aided groups of high school students to manage tables with STEM-related activities at the fair
- August 2015 - December 2016 **University of Florida Navigators International** Mentor, Gainesville, FL
- o Facilitated international students' assimilation into the University of Florida and to the American lifestyle
 - o Met weekly to check adjustment progress with new culture, language, and classes
 - o Remained readily available for whenever assistance was sought

Technical Skills

Programming R, JAVA, C++, MATLAB
Software LATEX, R MARKDOWN, MS WORD, MS EXCEL, MS POWERPOINT

Relevant Coursework

Courses Advanced Statistical Methods, Statistical Inference, Machine Learning, Probability

Languages

English Fluent
Spanish Fluent