Jennifer Momkus

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EDUCATION

Gillings School of Global Public Health,

Expected ~May 2025

University of North Carolina

PhD in Epidemiology (in progress)

Chapel Hill, North Carolina

Dissertation: Life Course Socioeconomic Status, Infection, Immunosenescence, and Cognitive Function

in Young Adults

Rollins School of Public Health, Emory University Master of Public Health, Epidemiology

May 2020

Atlanta, Georgia

Certificate in Socio-Contextual Determinants of Health

GPA: 4.0/4.0

Thesis: Visual Impairment and Reading Ability in High and Low Socioeconomic Status Children with a Unilateral Congenital

Cataract

The University of Chicago

June 2014

Bachelor of Science, Chemistry

Chicago, Illinois

GPA: 3.5/4.0

Academic Honors and Awards

Delta Omega Epidemiology Department Representative, 2020 The Institute for Biophysical Dynamics Scholars Fellowship, 2012 Dean's List 2010-2013 Graduated with General Honors, University of Chicago

WORK EXPERIENCE

Carolina Population Center

August 2022-Present

Biosocial Predoctoral T32 Trainee

- Investigate the relationships between life course socioeconomic status, persistent infections, immune function, and cognitive function in young adulthood and how the immune system may play a mediating role in accelerated biological and cognitive aging.
- Analyze data from Waves IV-V of the National Longitudinal Study of Adolescent to Adult Health (Add Health) in collaboration with study team to produce a manuscript describing population-level trends in biomarkers of aging among young adults in the United States and their associations with cognitive function.
- Lead a project on sociodemographic disparities in novel biomarkers of inflammation and neurodegeneration in a population representative cohort of young to early midlife adults.

University of North Carolina at Chapel Hill Department of Epidemiology Graduate Research Assistant August 2020-August 2022

- Research and summarize features of sensory and cognitive assessment tools for use in the Alzheimer's Disease and Related Dementias (ADRD) component of Add Health Wave VI
- Monitor and analyze incoming data from feasibility and pilot studies for the ADRD component of Add Health Wave VI. Report data updates to the PI's of the study.
- Facilitate planning meetings and project coordination with Carolina Population Center and RTI International study team for ADRD Add Health Wave VI
- Assist PI's with the creation of presentations and publications related to Add Health Wave VI progress and monitoring
- Consolidate and organize variables for the Detroit Neighborhood Health Study codebook

Centers for Disease Control and Prevention (CDC),

June-August 2020

Office of the Associate Director for Policy and Strategy,

Policy Research and Development Office

ORISE Fellow

- Create database of current health policy and intervention strategies that have been systematically reviewed in the CDC Community Guide or the County Health Rankings and Roadmaps
- Produce a coding system for policy and intervention strategies for team members to organize database for outside users
- Edit written and figure content for the CDC Polaris website; a tool used for curating policy-related resources for a variety of health topics
- Interpret recent publications related to legal epidemiology and/or public health research related to the effects of certain laws
- Work with lawyers and health scientists to investigate the relative strength of various legal epidemiological and policy-related public health research publications

Emory University

May-August 2020

Rollins School of Public Epidemiology Department,

Graduate Research Assistant

- Organize and clean data from Infant Alphakia Treatment Study and the Emory Eye Center to better understand the impact of Unilateral Congenital Cataracts on child development
- Analyze data to examine how bilateral vision impairment is associated with reading outcomes and self-perception outcomes
- Review current literature related to pediatric ophthalmological conditions such as amblyopia
- Assist the faculty with other tasks necessary for submitting research for publication such as writing a draft manuscript and creating tables of results
- Collaborate with staff at Decatur City Schools to determine what data will be used for research on the possible effects of absenteeism in elementary school and the trajectory of academic performance.
- Cleaning data for a research project on absenteeism and academic performance in elementary school students using statistical software and Excel

Centers for Disease Control and Prevention (CDC), National Center for Birth Defects and Developmental Disabilities, Division of Human Development and Disability, Child Development Studies (CDS) Team

October 2019-May 2020

Epidemiology Assistant

- Conducted statistical analyses and identified trends using national surveys with complex samples for projects related to children's mental health and child development
- Collaborated with health scientists to examine social, demographic, and mental health characteristics of children excluded from pre-school
- Reviewed current literature related to children's developmental disorders such as ADHD
- Synthesized summaries of pertinent studies into spreadsheets for scientific staff to reference
- Assisted the lead epidemiologist with peer-reviewing journal articles

Centers for Disease Control and Prevention (CDC), Office of Science, Office of Scientific Integrity, Public Health Ethics and Strategy Unit (PHESU)

May-August 2019

Ethics and Servant Leadership Intern

- Interviewed leaders in local and state health departments and identified trends in public health ethics activities
- Presented a summary of a study on current public health ethics activities in state and local health departments across the country to the Public Health Ethics Committee at the CDC
- Created slides for the team lead to utilize at a Public Health Ethics workshop at the National Association of County and City Health Officials (NACCHO) conference
- Conceptualized strategies to evaluate impact of ethics processes at health departments and presented recommendations to the PHESU and CDC Public Health Ethics Committee
- Discussed effective leadership and decision-making approaches to the functioning of a range of service-minded organizations in weekly meetings at the Emory Center for Ethics
- Attended weekly trainings and/or lectures on public health ethics, research ethics, and ethics-related topics

Northwestern University Clinical and Translational Sciences (NUCATS) Institute

December 2017-August 2018

Program Assistant 3

- Assessed submission of industry sponsored and investigator initiated clinical research studies to the Clinical Research Unit (CRU) at Northwestern Medicine for all required documentation and IRB status
- Reviewed research studies using study protocols, informed consent documents, and lab manuals and translated information to create budgets for required CRU nursing and laboratory services

- Oversaw research study review by clinical, laboratory, and pharmacy staff working in the CRU including moderating meetings and email correspondence for over 65 study submissions at a given time
- Tracked study progress and updated databases weekly for over 200 active studies based on communications with study teams, nurses, pharmacists, lab technicians, IRB staff and CRU managers

Thirty Million Words (TMW) at University of Chicago October 2017-December 2017 Medicine

TMW is an early childhood education initiative with a public health approach. They are working to develop evidence-based programs to address educational disparities stemming from social determinants of early brain development.

Temporary Research Support Assistant

- Prepared the director for meetings and presentations by gathering relevant notes, research, and background information
- Scheduled meetings for PI and other senior leaders at the initiative with a variety of different people including funders, collaborators, and reporters
- Researched early childhood education organizations across the county and prepared a spreadsheet with applicable information related to a request for partnerships
- Contributed to and refined content development for expansion of the Thirty Million Words website

Particle Technology Labs

A leading, FDA- registered particle characterization testing and consulting company that provides ISO and cGMP compliant analytical services to a variety of different industries including pharmaceutical, chemical, automotive, beauty and cosmetic, and environmental companies

Statistician

August 2015-March 2017

- Designed protocols to qualify the robustness and/or precision of new test methods and analytical instruments
- Analyzed and evaluated patterns in large quantities of data involved in complex projects using JMP statistical software
- Investigated potential systematic errors in new test methods by collaborating with management and chemists across multiple departments
- Produced reports on statistical findings and interpretations for clients

Particle Characterization Chemist II

August 2014-March 2017

- Analyzed the surface area and porosity of a wide array of materials utilizing different instrumentation and software
- Researched and experimented with new materials to develop test methods to yield surface area and porosity results
- Interpreted and explained test results directly to clients
- Qualified new analytical instrumentation and test methods following FDA Current Good Manufacturing Practice (cGMP) regulations
- Performed regular instrument upkeep and verification of functionality

- Trained and reviewed work of new chemists on three different types of surface area and porosity instruments
- Handled substances such as cryogenics and liquid mercury according to safety requirements and standard operating procedures

TEACHING EXPERIENCE

University of North Carolina at Chapel Hill

January 2023-May 2023

Advanced Epidemiologic Methods Teaching Assistant

- Assist instructors in explaining material to students and answering questions during labs
- Hold weekly office hours to answer student questions
- Track participation and assignment submission throughout the semester
- Provide feedback on creation of assignments and midterm exam. Assist with grading assignments, midterm exam and final projects.

Emory University, Rollins School of Public Health

August 2019-May 2020

Social Epidemiology Teaching Assistant

- Developed syllabus, assignments, and lectures in collaboration with professor
- Organized class website to ensure expectations and assignments were clear to students
- Presented assignments to students during class sessions
- Corresponded with students in person and via email to address confusion about topics pertaining to lectures and projects
- Tracked participation, attendance, and assignment submission throughout the semester
- Provided input on grading of presentations and assignments

Polk Brothers Foundation

A private foundation dedicated to strengthening Chicago communities most affected by poverty with a focus on community, family, education, health, and arts access Teaching Assistant October 2013-May 2014

- Tutored individual and groups of 2nd and 4th grade students in math weekly in public elementary schools in Chicago
- Instructed children with special education needs learning elementary school math
- Provided general logistical and administrative support to elementary school teachers

LEADERSHIP AND SERVICE EXPERIENCE

Alzheimer's Association Illinois Chapter

Junior Board Associate Member

December 2017-August 2018

- Generated financial support and acquired donations for annual Paint the Night Purple fundraising event to help raise over \$152,000 for the Alzheimer's Association
- Marketed other fundraising events such as the young professionals' summer picnic and the Walk to End Alzheimer's
- Volunteered at Sunrise Senior Living Facility at special events for residents
- Attended monthly lectures on current issues related to Alzheimer's

January 2017-June 2017

- Collaborated with a task force of professional women to strategically plan a sustainable program to empower and engage women in fight against Alzheimer's
- Interviewed professional women involved in other non-profit organizations about engagement initiatives focused on women
- Presented a proposal for a Women-focused program to the Executive Board for the Alzheimer's Association Illinois Chapter

Family Shelter Service

Young Professional Board President Young Professional Board Member September 2015-September 2016 September 2014-September 2016

- Elected president by other board members due to strong dedication and organizational skills
- Directed board to establish bylaws and introduced a sub-committee structure
- Solicited donations in excess of \$1,000 each year from local residents and businesses
- Recruited and interviewed six new board members via online platforms and networks of existing board members
- Planned agendas for monthly board meetings and prioritized tasks required for fundraising events
- Facilitated monthly meetings and conference calls about upcoming events and fundraising opportunities
- Bolstered total amount raised at annual Young Professionals Board trivia event from \$1,500 to over \$3,000 by increasing attendance and securing sponsorships from local businesses
- Coordinated fundraising events including the Annual young professionals' pub trivia night, Family Shelter Service annual gala, holiday toy drive, and the Heroes for Hope 5k/10K run

TRAININGS

- NACCHO Good Decision Making in Real Time: Practical Public Health Ethics for Local Health Officials, 2019
- CDC Office of Science Investigator Series-Certificates of Confidentiality 101, 2019
- CDC Office of Science Investigator Series-Informed Consent, 2019
- NUCATS-Clinical Research Workforce Excellence Program, 2018
- Enhancing Quality in the Translational Research Workforce Conference (EQuaTR), 2018
- Precision and Robustness Statistics for Chemists, 2015
- Current Good Manufacturing Practices Training, 2014

PRESENTATIONS

Oral Presentations

 "Comprehensive Alzheimer's Disease Risk Factors and Their Impact on Cognitive Function in Young Adults in the US" (Add Health Users Conference, Chapel Hill, NC, June 2024)

- "Socioepigenomics of Cellular Immunosenescence in Adulthood: The Add Health Study" (IGSS Conference, Boulder, CO, Oct. 2023)
- "Reading Ability in Children with a Unilateral Congenital Cataract" (APPOS Conference, Scottsdale, AZ, March 2022)
- "Visual Impairment and Reading Ability in High and Low Socioeconomic Status Children with a Unilateral Congenital Cataract", Emory University Rollins School of Public Health Thesis Presentations, 2020
- "Public Health Ethics Activities at State and Local Health Departments", (CDC Ethics Committee Meeting, June, 2019)
- "Ethics and Servant Leadership-Community Engagement", (D. Abbott Turner Program in Ethics and Servant Leadership (EASL) Summer Program, July, 2019)
- "An Introduction to Precision Statistics" (Particle Technology Labs, February, 2017)

Poster Presentations

- "Life Course SES Disadvantage Trajectories and Persistent Infections in Young Adulthood" (SER Conference, Austin, TX, June 2024)
- "Sociodemographic Patterns in Biomarkers of Aging in the Add Health Cohort" (IAPHS Conference, Baltimore, MD, Oct. 2023)
- "The Relationship between Biomarkers of Alzheimer's Disease and Related Dementia with Cognitive Function in Young Adulthood" (SER Conference, Portland, OR, June 2023)
- "Reading Ability in Children with a Unilateral Congenital Cataract" (AAPOS Conference, Scottsdale, AZ, March 2022)
- "Come get your child": preschool exclusion as an indicator of early childhood risk factors (AAP Conference, New Orleans, 2019)

Panelist

• Emory Business Ethics - The Intersection Between Healthcare and Business, Emory University Goizueta Business School, 2019

MEMBERSHIPS

- Inductee, Delta Omega Honorary Society in Public Health, inducted April 2020
- Member, Interdisciplinary Association of Population Health Sciences (IAPHS)
- Member, Society of Epidemiologic Research (SER)

SKILLS

- Experience with SAS, R, Stata, GIS, SUDAAN, and JMP
- Microsoft Office Suite (Excel, Word, PowerPoint, Access, and Outlook)