Ziling Mao

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Summary

Public health professional focusing on Epidemiology with more than 3 years' experience in research and programming in public health data. Proficiency in SAS, R, SPSS, as well as being self-motivated and detail-oriented in conducting research. Skilled in data cleaning, data analysis, research surveys and scientific writing.

Education

Emory University | Rollins School of Public Health — **Atlanta, United States**
Master of Public Health, Epidemiology — 05/2020

Capital Medical University | School of Public Health — **Beijing, China**
Bachelor's, Administration of Public Health Services — 07/2018

Research & Project Experiences

Rollins School of Public Health, Emory University

Advanced glycation end-products (AGEs) and all-cause and colorectal cancer-specific mortality risk among colorectal cancer survivors — 08/2020 – 09/2021

- Fitted restricted cubic splines to models to examine the relation of dietary intakes of AGEs with all-cause and colorectal cancer (CRC) mortality risk non-parametrically
- Applied SAS Macros to build nutrient residual model to control for confounding by total energy intake
- Generated forest plots to show the AGE-mortality associations stratified by selected patient characteristics
- Published manuscript as first author

Evolutionary-concordance Lifestyle Pattern Score and Cardiovascular disease Incidence — 03/2021 – 10/2021

- Conducted data manipulation and created evolutionary-concordance lifestyle pattern score
- Calculated hazard ratios (HRs) across score quintiles in relation to incident stroke and incident coronary heart disease using Cox proportional hazards models and conduct the Trend test in SAS
- Wrote manuscript as first author

Oxidative Balance Scores with Incident CRC risk and mortality among Older Women — 03/2019 – 08/2020

- Conducted data manipulation and created equal-weight dietary and lifestyle oxidative balance scores (OBS) in the Iowa Women's Health Study
- Calculated HRs across OBS quintiles in relation to CRC risk and mortality and conducted joint/combined analysis to assess potential interaction between dietary and lifestyle OBS using Cox models
- Generated cumulative incidence curves by score quintiles for various outcomes using competing risk methods
- Published manuscripts as first author

Department of Surveillance and Health Services, American Cancer Society

Cancer Stage, Treatment, and Survival among Transgender Patients in the US — 07/2019 – 05/2020

- Conducted data manipulation (e.g. outlier diagnosis, subsets merging and combination, variables recoding, and format adjustment) in the National Cancer Database
- Investigated associations of gender identity with advanced cancer stage at diagnosis and receipt of cancer treatment using multivariable logistic regression and Cox proportional hazards regression

- Built a SAS Macro to calculate site-specific proportional incidence ratios comparing transgender to cisgender patients within age group, race, insurance status, and year of diagnosis- specific strata

Skills

Programming and computer skills: SAS (SAS Base, SAS Macro, and SAS SQL), R, SPSS, SQL, ACCESS, SEER*Stat, ArcGIS, EndNote, Microsoft Office (Word, Excel, and PowerPoints)

Certificates: Certified Base Programmer for SAS 9

Certified Advanced Programmer for SAS 9

Professional Experiences

Graduate School of Public Health, University of Pittsburgh **Pittsburgh, PA, United States**

Graduate Student Researcher | Part-time 08/2021 – present

- Data collection and transfer microbiome samples on a weekly basis for a microbiome study
- Conduct descriptive analyses on meal timing-related pattern using National Health and Nutrition Examination Survey data

Rollins School of Public Health, Emory University **Atlanta, GA, United States**

Data Analyst/Research Assistant | Full-time 06/2020 – 08/2021

- Conduct statistical analyses using SAS and helping to manage multiple databases
- Lead several research projects and writing manuscripts as first author
- Help MPH/MSPH students with SAS coding and data analyses

Teaching Assistant | R Boot Camp | Part-time 08/2019 –11/2019

- Diagnosed and resolved individual misunderstandings related to R Studio during office hours for students
- Aided course instructors in maintaining their Canvas site and posting announcements

Dept. of Surveillance and Health Services, American Cancer Society **Atlanta, GA, United States**

Analyst Intern | Part-time 04/2019 – 05/2020

- Performed literature review on the impact of *Affordable Care Act* policy on cancer patients
- Manipulated large cancer databases (with more than 1,000,000+ observations)
- Conducted statistical analyses (including plot generations, survival analyses, multivariable regression models) using SAS SQL and SAS Macro

Beijing An Zhen Hospital, Capital Medical University **Beijing, China**

Research & Analyst Intern | Full-time 11/2017 – 06/2018

- Completed patient satisfaction survey on chronic including survey collection, data entry, and data cleaning
- Conducted descriptive statistical analyses on patients' demographic information using SPSS

Professional Memberships and Service

Associate Member, American Association for Cancer Research (AACR)	12/2019
Phi Chapter of Delta Omega Honorary Society of Public Health	05/2020
Reviewer for Journal of the National Comprehensive Cancer Network	08/2020

National Presentations

Poster Session, American Association for Cancer Research (AACR) Annual Meeting 2020 05/2020
(Poster title: Lifestyle and dietary oxidative balance scores and risk for incident colorectal cancer)

Poster Session, American Association for Cancer Research (AACR) Annual Meeting 2021 05/2021
(Poster title: Associations of dietary and lifestyle oxidative balance scores with mortality risk among older women: the Iowa Women's Health Study)

Publications

Published Peer-Reviewed Journal Articles

1. **Mao Z**, Aglago E, Zhao Z, Schalkwijk C, Jiao L, Freisling H, et al. (2021) Dietary intake of advanced glycation end products (AGEs) and mortality among individuals with colorectal cancer. *Nutrients*. https://doi.org/10.3390/nu13124435
2. **Mao Z**, Bostick RM. (2021). Associations of Dietary, Lifestyle, Other Participant Characteristics, and Oxidative Balance Scores with Plasma F2-isoprostanes Concentrations in a Pooled Cross-Sectional Study. *Eur J Nutr*. https://doi.org/10.1007/s00394-021-02754-2
3. **Mao Z**, Prizment AE, Lazovich D, Bostick RM (2021). Associations of dietary and lifestyle oxidative balance scores with mortality risk among older women: the Iowa Women's Health Study. *Eur J Nutr*. https://doi.org/10.1007/s00394-021-02557-5
4. Jackson SS; Han X; **Mao Z**; Nogueria L; Suneja G; Jemal A; and Shiels MS (2021). Cancer Stage, Treatment, and Survival Among Transgender Patients in the United States. *JNCI: Journal of the National Cancer Institute*. https://doi.org/10.1093/jnci/djab028
5. **Mao Z**, Prizment AE, Lazovich D, Gibbs DC, Bostick RM (2020). Dietary and Lifestyle Oxidative Balance Scores and Incident Colorectal Cancer Risk Among Older Women; the Iowa Women's Health Study. *Nutr Cancer*. https://doi.org/10.1080/01635581.2020.1821904
6. Kiran N, Prizment A, Lazovich D, **Mao Z**, Bostick RM (2020). Sucrose intakes and incident colorectal cancer risk among women. *J Am Coll Nutr*. https://doi.org/10.1080/07315724.2020.1848661
7. Zhao J, **Mao Z**, Fedewa SA, Nogueira L, Yabroff KR, Jemal A, and Han X (2020). The Affordable Care Act and access to care across the cancer control continuum: A review at 10 years. *CA: A Cancer Journal for Clinicians*. https://doi.org/10.3322/caac.21604
8. Xu S, Shi J, **Mao Z**, Lan L, Song H, Meng K et al. (2019). Study on fertility willingness and impact factors of pregnant women in Beijing. *Maternal & Child Health Care in China*.
9. Zhang J, Xu S, Shi J, **Mao Z**, Lan L, Du L, et al. (2019). An analysis of fertility desire and influence factors for medical stuff in one of Maternal and Child Health Care Hospitals in Beijing. *Maternal & Child Health Care in China.*

Submitted Peer-Reviewed Journal Articles Under Review

1. Ji X, Liu X, **Mao Z**, Zhang W, Zhang J, Sun X, Han X. Childhood Cancer Survivorship in China: A review of the past two decades. (Submitted to *Cancer Medicine*)
2. **Mao Z,** Gray ALH, Gross MD, Thyagarajan B, Bostick RM. Antioxidant enzyme and DNA base repair genetic risk scores, oxidative balance score, and plasma F_2-isoprostanes concentrations in pooled cross-sectional studies. (Submitted to *Free Radical Research*)
3. **Mao Z,** Gray ALH, Gross MD, Thyagarajan B, Bostick RM. Antioxidant enzyme and DNA base repair genetic risk scores, dietary and lifestyle inflammation scores, and circulating high sensitivity C-reactive protein concentrations in two pooled cross-sectional studies. (Submitted to *Inflammation*)

Abstracts

1. **Mao Z**, Prizment AE, Lazovich D, Gibbs DC, Bostick RM. Lifestyle and dietary oxidative balance scores and risk for incident colorectal cancer among older women: the Iowa Women's Health Study. *Proc AACR* 2020; 61:Abstract #3212.
2. **Mao Z**, Prizment A, Lazovich D, Bostick RM. Associations of dietary and lifestyle oxidative balance scores with all-cancer, all-CVD, and all-cause mortality risk among older women; the Iowa Women's Health Study. Proc AACR 2021; 62:Abstract #846.