# **Zeping Yang**

No.38 Xueyuan Road, Haidian District, Beijing, China, 100191 Tel: 86-188-8237-8595; E-mail: <a href="mailto:zepingyang@bjmu.edu.cn">zepingyang@bjmu.edu.cn</a>

#### EDUCATIONAL BACKGROUND

# Peking University Health Science Center (PUHSC), Beijing, China

Sep.2018-Jun.2023

- ➤ Bachelor of Medicine in Preventive Medicine; GPA (WES): 3.16/4.0.
- Core courses: Epidemiology (88/100), Environmental Health (84/100), Public Health Leadership (97/100), Social Medicine (100/100), Fundamentals of Toxicology (89/100), Child and Adolescent Health (93/100), Maternal and Child Health (88/100), Global Health (84/100), Public Health Communication (86/100), Pharmacology (91/100), etc.

#### Department of Epidemiology & Biostatistics, PUHSC, Beijing, China

Sep.2023-Present

- Master of Science in Epidemiology and Health Statistics; GPA (WES): 3.14/4.0.
- Core courses: Reproductive and Perinatal Epidemiology (A), Genetic Epidemiology (A-), Application of R Packages in Clinical Epidemiology (A), Health Mapping (A), Medical Research with Public Data (A-), Management and Analysis of Medical Big Data (A-), etc.

#### **PUBLICATIONS**

#### **First Author Papers**

- 1. **Yang, Z.**, Huang, N., Zhuang, Z., Jin, M., Zhang, Z., Song, Y., Cui, H., Zhang, S., Huang, T., Liu, X., & Li, N\*. Earlier age at menopause, plasma metabolome, and risk of premature mortality. JAMA Network Open. **2024**, 2: 100071. (**IF = 10.5**)
- 2. Cui, H. #, Yang, Z. #, Zhang, Y., Lü, J., Hao, Y., & Yu, C \*. Age-period-cohort model analysis on trends of morbidity and mortality of esophageal cancer in China from 1990 to 2019. Chinese Journal of Prevention and Control of Chronic Diseases. 2023, 31(4), 241-245. doi:10.16386/j.cjpccd.issn.1004-6194.2023.04.001 (in Chinese).
- 3. **Yang, Z.**, Li N., et al. Early-life risk factors, accelerated biological aging and the late-life risk of CKM syndrome: A prospective cohort study in the UK Biobank. (In preparation)
- 4. **Yang, Z.**, Li N., et al. Associations of earlier age at menopause, polysocial risk score, and lifestyle with the risk of depression and anxiety: A prospective cohort study. (In preparation)

# Co-authored papers

- 1. Liu, X., Liu, X., Huang, N., Yang, Z., Zhang, Z., Zhuang, Z., Jin, M., Li, N. \*, & Huang, T. Women's reproductive risk and genetic predisposition in type 2 diabetes: A prospective cohort study. Diabetes research and clinical practice. 2024, 208, 111121. doi:10.1016/j.diabres.2024.111121 (IF = 6.1)
- 2. Liu, X., Liu, X., Yang, Z., Li, Z., Zhang, L., Zhang, Y., Liu, J., Ye, R., & Li, N\*. The Association of Infant Birth Sizes and Anemia under Five Years Old: A Population-Based Prospective Cohort Study in China. Nutrients. 2024, 16(12), 1796. doi:10.3390/nu16121796 (IF = 4.8)
- 3. Cui, H., Shen, S., Chen, L., Fan, Z., Wen, Q., Xing, Y., Wang, Z., Zhang, J., Chen, J., La, B., Fang, Y., Yang, Z., Yang, S., Yan, X., Pei, S., Li, T., Cui, X., Jia, Z. \*, & Cao, W. Global epidemiology of severe fever with thrombocytopenia syndrome virus in human and animals: a systematic review and meta-analysis. The Lancet regional health. Western Pacific. 2024, 48, 101133. doi:10.1016/j.lanwpc.2024.101133 (IF = 7.6)
- 4. Zhang, Z., Liu, X., Huang, N., Jin, M., Zhuang, Z., Yang, Z., Liu, X., Huang, T., & Li, N\*. Joint association and interaction of birth weight and lifestyle with hypertension: A cohort study in UK Biobank. Journal of clinical hypertension (Greenwich, Conn.). 2024, 26(5), 483-490. doi:10.1111/jch.14792 (IF = 2.7)
- 5. Zhang, S., Lodder, P., Yang, F., Huang, N., Yang, Z., Feng, X., & Guo, J. (2024). Social determinants of health and depressive symptoms in 142,600 older adults: A multi-cohort study. Bulletin of the World Health Organization. **2024** (Under review).

[# equal contribution; \* corresponding author]

#### RESEARCH EXPERIENCE

#### Data Analysis of Pregnancy Nutrition Intervention Project (PNIP) in Hebei, China

Jul.2024-Present

Research Assistant; Advisor: Prof. Rongwei Ye, Institute of Reproductive and Child Health, PUHSC

- Analyzed data from the Pregnancy Nutrition Intervention Project (N = 18,775), a randomized controlled trial (2006-2009) in five counties in Hebei, conducted by the Institute of Reproductive and Child Health, Peking University, in collaboration with the U.S. Centers for Disease Control and Prevention (CDC).
- Investigated the relationship between air pollution exposure, normalized difference vegetation index (NDVI), and the incidence of postpartum hemorrhage.

#### **UK Biobank Public Database Data Mining (Beijing Natural Science Foundation)**

Aug.2023-Present

Group Leader; Advisor: Prof. Nan Li, Institute of Reproductive and Child Health, PUHSC

- Led the entire research process using the UK Biobank (N = 502,000), including conducting the literature review, performing data analysis, drafting the manuscript, and responding to editorial and peer review comments for revisions.
- Used machine learning method to analyze 167 metabolites in plasma, identifying a distinct metabolomic signature related to age at menopause, which mediates the association between earlier age at menopause and premature mortality. Contributed to a first-author paper named *Earlier age at menopause*, plasma metabolome, and risk of premature mortality, currently under review at JAMA Network Open.
- Conducted in-depth data mining and analysis within the UK Biobank dataset, uncovering key associations between early-life risk factors, accelerated biological aging, and the late-life risk of CKM syndrome, as well as exploring how earlier age at menopause, polysocial risk score, and lifestyle behaviors interact to influence the risk of depression and anxiety.

Cohort Study at Haidian Maternal and Child Health Hospital in Beijing (National Natural Science Foundation of China)

Dec.2022-Present

Research Assistant; Advisor: Prof. Zhiwen Li, Institute of Reproductive and Child Health, PUHSC

- Processed questionnaires, performed data entry, and conducted data cleaning and exploratory analysis for a large-scale cohort study (N = 4,239).
- Investigated the relationship between air pollution exposure, normalized difference vegetation index (NDVI), and various adverse pregnancy outcomes, while also exploring associations between paternal BMI, lifestyle factors, maternal BMI, and dietary intake.
- Developed skills in data management, statistical analysis (R, Stata, ArcGIS, Python, SPSS), and team management.

#### Web Data Mining for Analysis of Third-Party Medical Testing Institutions in China

Jun.2022-Apr 2023

Group Leader; Advisor: Prof. Wen Feng, Department of Health Policy and Management, PUHSC

- Led a group in data collection and analysis for a study on the current status and personnel needs of third-party medical testing institutions in China, culminating in a comprehensive final report.
- Developed skills in team management, web scraping with Python, statistical analysis and visualization using R, and research report writing.

#### Global Burden of Disease (GBD) Data Mining for Esophageal Cancer Trends in China

Oct.2021-May.2022

Group Leader; Advisor: Prof. Canqing Yu, Department of Epidemiology & Biostatistics, PUHSC

- Leveraging esophageal cancer data from the GBD database, conducted data analysis using an age-period-cohort approach and contributed to writing and publishing the research findings as an article.
- Gained skills in teamwork, mining public databases, data analysis using R software, applying age-period-cohort models, and academic writing.

#### Social Medicine Course Project: a Qualitative Study

Sep.2020-Jan.2021

Group Leader; Advisor: Prof. Hui Yin, Department of Global Health, PUHSC

- Led the entire process of a qualitative research study on sources and mechanisms of peer pressure among Peking University undergraduates, including overseeing data collection, data analysis, and drafting the report and publication.
- Developed skills in brainstorming research topics, team management, qualitative data collection and management, and qualitative analysis using NVivo software.

## **Beijing Chaoyang District Center for Diseases Prevention and Control (CDC)**

Sep.2022-Nov.2022

- Assisted in the Disinfection and Vector Control Department, conducting field inspections with the supervising officer to assess public health standard compliance in various public places.
- Led the epidemiological investigation team during a COVID-19 resurgence, coordinating team members in collecting and compiling contact tracing information via phone calls.

# **Beijing Haidian Hospital**

- Learned clinical theory in internal medicine, surgery, and pediatrics, practiced basic clinical skills, such as cardio-pulmonary resuscitation and electrocardiography, and participated in case discussions.
- Completed internship rotations across Internal Medicine, Surgery, Obstetrics and Gynecology, Pediatrics, Community Health Center, and Infectious Disease Research Institute.
- Assisted with electrocardiogram examinations, surgical skin suturing, and ward rounds with the attending physician, etc.

### **EXTRACURRICULAR ACTIVITIES**

### Global Health Governance Training Program, Mahidol University & Thai Ministry of Public Health Core Member

Aug.2023-Sep.2023

- Communicated with professors and students from Mahidol University, and discussed topics such as tobacco control, maternal and child health, and air pollution.
- Engaged with officials and experts from the Ministry of Public Health of Thailand, exchanged ideas and discussed topics about innovative health financing, disease surveillance, and traditional medicine practices.

#### Preventive Medicine Undergraduate Class, PUHSC

Mar.2022-Jul.2023

Class Monitor, Class Committee

Managed daily class affairs and organized class activities to enhance student engagement and cohesion.

# The Student Branch of Peking University Red Cross Society, PKU

Sep.2022-Sep.2023

President

Oversaw daily operations, led promotional and designed initiatives to enhance the society's visibility and engagement.

# SELECTED HONORS AND AWARDS

Silver Award, 8th China International "Internet+" Innovation and Entrepreneurship Competition

Jun.2023 May.2021

The First Prize, 29th "Challenge Cup" Peking University Interdisciplinary Group

The First Prize, 28th "Challenge Cup" Peking University Interdisciplinary Group

May.2020

#### PROFESSIONAL SKILLS

- Computer skills: R, Stata, SPSS, Python, C, EpiData, PASS, ArcGIS, ENVI, IDL, Linux Command, Word, Excel, PowerPoint, Adobe Photoshop, Adobe Illustrator, Adobe Premiere Pro.
- Language skills: Chinese (Native), English (Fluent).
- Hobbies: Programming, Language learning, Table Tennis, Badminton, Tennis, Basketball, Swimming.