

Lili (Larry) Liu

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**EDUCATION**

Vanderbilt University	Nashville, TN, USA
Doctor of Philosophy Genetic, Molecular and Nutrition Epidemiology	Estimated 05/2025
<i>GPA: 3.90/4.00</i>	
Peking University	Beijing, China
Master of Public Health Epidemiology and Biostatistics	09/2018 - 07/2021
<i>Outstanding Graduates</i>	
Bachelor of Science in Nursing	09/2014 - 07/2018
<i>Scholarship for Excellent Medical Students (top 3%), Outstanding Student Cadres</i>	
Minor in Psychological and Cognitive Science	09/2015 - 06/2017

RESEARCH EXPERIENCES**Cancer and Molecular Genetics** - colorectal & breast cancer, gut microbiome

- Genome-wide association study for urinary prostaglandin E2 metabolite (PGE-M)
- Mendelian randomization (MR) analysis of blood lipids/urinary PGE-M with CRC risk
- Impacts of lifestyle intervention via modulating PGE-M levels on CRC risk
- Racial differences of putative risk gene expressions in normal/tumor tissues for BC
- Association of African ancestry with triple-negative BC
- Multi-ancestry transcriptome/proteome-wide association study for BC
- Income, race and survival of lung, breast, prostate and colorectal cancer
- Risk factors of lung cancer incidence and survival in low-income Americans
- Influences of alcohol intake, smoking, physical activity, and diet on gut microbiome

All-cause and Cause-specific Mortality - temporal trend, risk factors

- Opioid overdose death trend by race and income in predominantly low-income Americans
- Impacts of poverty and health lifestyles on mortality
- Associations between sitting time, physical activity, daily walking and mortality
- Associations of sleeping length with mortality and risk of breast and prostate cancer

Drug and Vaccine - safety surveillance, post-market effectiveness (EHR data)

- Scoping review of active surveillance systems for vaccine safety
- Effectiveness of EV-A71 vaccine in prevention of pediatric hand, foot, and mouth disease due to EV-A71 virus infection in Ningbo, China

Rare Diseases - insurance database, online survey

- Estimating prevalence and incidence of >10 rare diseases using national insurance database
- Systematic review of global prevalence and incidence for amyotrophic lateral sclerosis
- Survey of health information accessibility in patients with rare bone diseases
- Evaluation of online health information related to rare disease through WeChat

Psychological and Cognitive Events - cognitive decline, depression

- Association of lipids with cognitive decline in middle-aged and elderly adults
- Association between serum lipids and depressive symptoms

INTERNSHIPS & OTHER EXPERIENCES

- Molecular Epidemiology Core Lab at Vanderbilt Epidemiology Center** 05 - 08/2022
- DNA extraction from blood samples, routine biorepository operations
- Boehringer Ingelheim Health Provider-Medical** 12/2019 - 02/2020
- Research assistant responsible for data organization and documentation
- Peking University Second Hospital** 05/2017 - 05/2018
- Rotation in cardiology, gynecology and obstetrics, surgery, pulmonology, and ICU
- Student Union of Peking University Health Science Center** 09/2014 - 06/2018
- Served as the member, director of new-media department, vice chair, and chair
- Backpacking in *the Great Smoky Mountain National Park*** 03/2024
- Hiked 20 miles and camped 4 days
- Solo Cycling alongside the Beijing-Tibet National Highway (G109)** 07 - 08/2019
- Rode 3000+ miles in 28 days, crossed 13 provinces, and wrote 30 articles

SELECTED PUBLICATIONS

- [1] **Liu L**, Wen W, Shrubsole MJ, et al. Impacts of Poverty and Lifestyles on Mortality: A Cohort Study in Predominantly Low-Income Americans. *Am J Prev Med*. 2024 Jul;67(1):15-23. [NCI EGRP 2024 highlight]
- [2] **Liu L**, Nguyen SM, Wang L, et al. Associations of alcohol intake with gut microbiome: a prospective study in a predominantly low-income Black/African American population. *Am J Clin Nutr*. 2024 Nov 11.
- [3] Chan WC *, **Liu L** *, Bouras E, et al. Associations of blood lipids and LDL cholesterol lowering drug-targets with colorectal cancer risk: a Mendelian randomization study. *Br J Cancer*. 2024 Nov 23.
- [4] **Liu L**, Wen W, Andersen SW, et al. Sitting Time, Physical Activity and Mortality: A Cohort Study In Low-Income Older Americans. *Am J Prev Med*. 2024 Dec;67(6):924-931.
- [5] **Liu L**, Liu Z, Zhang L, et al. Epidemiological and etiological characteristics of hand, foot and mouth disease among children aged 5 years and younger in Ningbo (2016 to 2019). *Journal of Peking University (Health Sciences)*. 2021 Jun;53(3):491-497.
- [6] **Liu L** *, Zhang C *, Lv X, et al. Sex-specific associations between lipids and cognitive decline in the middle-aged and elderly: a cohort study of Chinese adults. *Alzheimers Res Ther*. 2020 Dec;12(1):164.
- [7] **Liu L**, Lai X, Xu L, et al. A cross-sectional study on current status of rare disease related health information based on WeChat official accounts in China. *Chin J Epidemiol*. 2020, 41(3): 446-451.
- [8] **Liu L**, He B, Chen W, et al. Survey of access and demands of health information in patients with rare bone diseases and their families. *Chin J Dis Control Prev*. 2020 Oct; 24 (10): 1219-1223.
- [9] **Liu L**, Lai X, Liu T, et al. Quality assessment of the therapeutic health information of rare neurological diseases on WeChat official account. *Chin J Dis Control Prev*. 2020 Nov; 24 (11):1321-6.
- [10] Cai T, **Liu L**, Yao X, et al. Scoping review of active surveillance systems for worldwide vaccine safety. *Chin J Prev Med*. 2019 53(7): 724-730.
- [11] Xu L, Liu T, **Liu L**, et al. Global variation in prevalence and incidence of amyotrophic lateral sclerosis: a systematic review and meta-analysis. *J Neurol*. 2020, 267(4):944-953.
- [12] Xu L, Wang K, Wang S, **Liu L**, et al. Sex differences in the association between serum lipids and depressive symptoms: A longitudinal population-based study. *J Affect Disord*. 2021 Aug, 291:154-162.
- [13] Wang S, Xu L, Feng J, Liu Y, **Liu L**, et al. Prevalence and Incidence of Multiple Myeloma in Urban Area in China: A National Population-Based Analysis. *Front Oncol*. 2020, 9:1513.

TECHNICAL SKILLS

R, SAS, Python; Photography, Photoshop, Adobe Premiere Pro