

Fangzhou (Eric) Liu

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Cleveland, Ohio | fxl198@case.edu

PROFESSIONAL POSITIONS

Department of Population and Quantitative Health Sciences, School of Medicine, Case Western Reserve University, Cleveland, Ohio

Research Associate, Specialized Technical Skills July 10, 2023 – Present

Thoracic Oncology Program, University Hospitals Seidman Cancer Center, Cleveland, Ohio

Biostatistician August 1, 2024 – Present

School of Medicine, Case Western Reserve University, Cleveland, Ohio

Teaching Assistant August 2024 – Present

Courses Taught: PQHS515: Secondary Analysis of Large Health Care Databases

EDUCATION

Ph.D. in Clinical Translational Science July 2025 – Present

Case Western Reserve University, Cleveland, Ohio, USA

M.S. in Computer Science April 2023 – June 2025

Westcliff University, Irvine, California, USA

M.S. in Statistics August 2020 – May 2022

The George Washington University, Washington, D.C., USA

B.S. in Statistics August 2016 – May 2020

Case Western Reserve University, Cleveland, Ohio, USA

RESEARCH INTERESTS

Focus Areas: Cancer epidemiology, health disparities, lung cancer screening, social determinants of health, cancer burden

Disciplinary Expertise: Cancer population sciences, social epidemiology, health services research

Methodological Strengths: Statistical modeling (multivariable regression, survival analysis, machine learning), survey methodology and weighted analyses, Geographic and spatial analysis, analysis of large health databases

REVIEWER FOR JOURNALS AND CONFERENCES (total: 11)

Journal of Gastrointestinal Cancer (1)

Cancer Causes & Control (1)

Oncologie (2)

Scientific Reports (1)

Journal of Racial and Ethnic Health Disparities (2)

Qeios (1)

JMIR Public Health and Surveillance (1)

BMC Public Health (2)

PUBLICATIONS (JOURNAL ARTICLES)

Bobbitt, J. R., **Liu, F.**, Keri, R. A., & Cullen, J. Cancer burden in Ohio neighborhoods with greater racial diversity and environmental burden. *JAMA Network Open*. 2025;8(6): e2516740.

Dong, W., Lal, T., **Liu, F.**, Pronovost, P., Bora, S., & Hoehn, R. S. Methodological considerations for optimal variable selection in machine learning for health services research. *Health Serv Outcomes Res Method* (2025).

Lewis, K., Cannarella, R., **Liu, F.**, Roth, B., Bushweller, L., Millot, J., ... & Lundy, S. D. (2024). Sperm concentration remains stable among fertile American men: A systematic review and meta-analysis. *Fertility and Sterility*, 123(1), 77–87.

PUBLICATIONS (CONFERENCE ABSTRACTS)

Davis, L. E., **Liu, F.**, Dong, W., Rose, J., Koroukian, S., & Vince, R. (2025). Early onset prostate cancer: A complex interplay between race, poverty, and incidence [Abstract]. *The Journal of Urology*, 213(5_Supplement), PD18-08.

Zhong, J., **Liu, F.**, Kaur, J., Zhang, A., Zablotski, K., Chahine, R., Trinh, I., Wang, Q., Brister, L., & Hsu, M. (2025). Comprehensive assessment of provider perspectives of cancer survivorship needs. *Supportive Care in Cancer*, 33(Suppl 1), S384.

Hsu, M. L., **Liu, F.**, Kyasaram, R. K., Zhong, J., & Dowlati, A. (2025). Real-world outcomes in patients living with HIV with lung cancer and treated with immune checkpoint inhibitors. *Journal of Clinical Oncology*, 43(16_suppl), 11156–11156.

Seitz, E., **Liu, F.**, Chi, W., Rao, R., Gong, J., Prasad, S., ... Wang, Q. (2025, September). Effect of social determinants of health on lung cancer screening uptake in the US. *World Conference on Lung Cancer (WCLC) 2025*, Boston, MA, USA.

Gong, J., Wen, C., Guo, E., Xie, H., Jiang, C., **Liu, F.**, Hsu, M., & Wang, Q. (2025, October). The influence of social determinants of health on vaccination uptake in cancer survivors in the United States. *ASCO Quality Care Symposium 2025*, Boston, MA, USA.

Kailar, R., **Liu, F.**, Yammani, D., Raghuwanshi, Y., Dowlati, A., Hsu, M. L., Wang, Q., Mirsky, M., & Chiec, L. (2025, September). Disparities in lung cancer treatment for older adults. *World Conference on Lung Cancer (WCLC) 2025*, Boston, MA, USA.

Cullen, J., Liu, T., Hartman, H., **Liu, F.**, Alfahmy, A., Ghosh, R., ... & MacLennan, G. (2024). Joint roles of proteomics and neighborhood-level social determinants of metastatic prostate cancer. *Cancer Epidemiology, Biomarkers & Prevention*, 33(9_Supplement), A039.

Bobbitt, J. R., **Liu, F.**, Cullen, J., & Keri, R. A. (2024). Assessment of racial and ethnic disparities in environmental exposure-related cancer burden. *Cancer Research*, 84(6_Supplement), 853.

MANUSCRIPTS UNDER REVIEW

Lal, T., Kang, C. O., **Liu, F.**, Hoehn, R. S., Rose, J., & Koroukian, S. M. (2025). Evaluating the impact of COVID-19 on emergency colorectal cancer resection during COVID-19. (Under review at *JAMA Health Forum*)

Hsu, M. L., **Liu, F.**, Kyasaram, R. K., Zhong, J., ... Dowlati, A. (2025). Brief Report: Real-World Outcomes in Patients living with HIV with Lung Cancer treated with Immune Checkpoint Inhibitors. (Under review at *JTO Clinical and Research Reports*)

Lal, T., **Liu, F.**, Cabulong, A., Kang, C. O., Hoehn, R. S., Rose, J., & Koroukian, S. M. (2025). Age-stratified risk profiles for emergency colorectal cancer resection: A national machine learning-based analysis. (Under review at *Journal of Clinical Oncology*)

Apte, T., **Liu, F.**, Cullen, J., & Ghosh, R. (2025). Investigating the impact of social determinants of health on the incidence of pediatric cancer in the United States. (Under review at *JAMA Pediatrics*)

Cullen, J., Liu, T., Hartman, H., **Liu, F.**, Al Fahmy, A., Ghosh, R., ... MacLennan, G. (2025). Joint roles of proteomics and neighborhood-level predictors of de novo metastatic prostate cancer in Black and White men. (Under review at *Cancer Cell*)

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