Bochu Liu

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Research Fields

Health geography, Healthy city planning, Spatiotemporal behavior analysis, Urban data science

Education

- Doctor of Philosophy (PhD): Geography, Department of Geography and Planning, University of Toronto, September 2018 - July 2022, Toronto, Canada.
- Master of Science (MSc): Human Geography, College of Urban and Environmental Sciences, Peking University, September 2015 - July 2018, Beijing, China.
- Exchange Student: The University of Melbourne, February 2013 - June 2013, Melbourne, Australia.
- Bachelor of Engineering (BEng): Urban Planning (Five-Year Program), School of Architecture and Urban Planning, Nanjing University, September 2010 - July 2015, Nanjing, China.

Professional Experience

- Assistant Professor, Department of Urban Planning, College of Architecture and Urban Planning, Tongji University, July 2023 – Present, Shanghai, China.
- Visiting Researcher (Remote), Medical Research Council (MRC) Unit of Epidemiology, University of Cambridge, July 2023 – Present, Remote.
- Research Associate, Medical Research Council (MRC) Unit of Epidemiology, University of Cambridge, June 2022 - June 2023, Cambridge, UK.

Publications

Refereed Journal Articles

1. **Liu, B.**, Widener, M. J., Smith, L. G., & Gesink, D. (2023). Integrating coordination of food purchasing into activity space-based food environment research: Toward a household perspective. *Health & Place*, *82*, 103046. (SSCI)

2. **Liu, B.**, M. J. Widener, L. G. Smith, S. Farber, D. Gesink, L. M. Minaker, Z. Patterson, K. Larsen, and J. Gilliland. (2022) "Time-geographic Project of Household Food Provision: Conceptualization and a Pilot Case Study." *Annals of the American Association of Geographers*, 113(3), 675-699. (SSCI)

3. **Liu, B.**, Widener, M. J., Smith, L. G., Farber, S., Gesink, D., Minaker, L. M., Z. Patterson, K. Larsen, and & Gilliland, J. (2022). Who's cooking tonight? A time-use study of coupled adults in Toronto, Canada. *Time & Society*, 31(4), 480-507. (SSCI)

4. **Liu, B.**, Widener, M. J., Smith, L. G., Farber, S., Minaker, L. M., Patterson, Z., Larsen, K., & Gilliland, J. (2022). Disentangling Time Use, Food Environment, and Food Behaviors Using Multi-Channel Sequence Analysis. *Geographical Analysis*, 54(4), 881-917.   (SSCI)

5. **Liu, B.**, Zhou, K., Lei, A., Wang, Y., & Wang, L. Research on the Factors Influencing Online Food Consumption Based on Multi-source Data: A Case Study of Hongkou District, Shanghai. (2024). *Urban Planning International*, (5). (CSSCI)

6. **Liu, B.** & Wang, L. Behavioral and Health Impacts of the Urban Food Environment: Research Progress and Prospects (2024). *Urban Planning International*, (5). (CSSCI)

7. **Liu, B.**, Widener, M., Burgoine, T., & Hammond, D. (2020). Association between Time-Weighted Activity Space-Based Exposures to Fast-Food Outlets and Fast-Food Consumption among Young Adults in Urban Canada. *International Journal of Behavioral Nutrition and Physical Activity*, 17(1), 1–13. (SCIE)

8. Ma, J., **Liu**, **B.**, Mitchell, G., & Dong, G. (2019). A Spatial Analysis of Air Pollution and Environmental Inequality in Beijing, 2000–2010. *Journal of Environmental Planning and Management*, 62(14), 2437–2458. (SSCI)

9. Smith, L., Widener, M., **Liu**, **B.**, Farber, S., Minaker, L., Patterson, Z., Kristian, L., & Gilliland, J. (2022). Comparing Household and Individual Measures of Access through a Food Environment Lens: What Household Food Opportunities Are Missed When Measuring Access to Food Retail at the Individual Level?. *Annals of the American Association of Geographers*, 112(2), 542-562. (SSCI)

10. Palm, M., Allen, J., **Liu**, **B.**, Zhang, Y., Widener, M., and Farber, S. (2021). Riders Who Avoided Public Transit During COVID-19: Personal Burdens and Implications for Social Equity. *Journal of the American Planning Association*, 87(4), 455-469. (SSCI)

11. DeJohn, A., Widener, M., **Liu, B.**, Ma, X., & Liu, Z. (2023). Avenues of Social Isolation and Health Among Older Chinese Migrants: A Structural Equation Modeling Approach. *Innovation in Aging*, *7*(Suppl 1), 995. (SSCI, SCIE)

12. Rahilly, J., Amies-Cull, B., Chang, M., Cummins, S., Derbyshire, D., Hassan, S., Huang, Y., Keeble, M., **Liu B.**, Medina-Lara, A., Mytton, O., Rogers, N., Savory, B., Schiff, A., Sharp, S. J., Smith, R., Thompson, C., White, M., Adams, J., & Burgoine, T. (2024). Changes in the number of new takeaway food outlets associated with adoption of management zones around schools: A natural experimental evaluation in England. *SSM-Population Health*, 26, 101646. (SSCI)

13. Rahilly, J., Williams, A., Chang, M., Cummins, S., Derbyshire, D., Hassan, S., Huang, Y., Keeble, M., **Liu B.**, Medina-Lara, A., Mytton, O., Savory, B., Schiff, A., Sharp, S. J., Smith, R., Thompson, C., White, M., Adams, J., & Burgoine, T. (2024). Changes in the number and outcome of takeaway food outlet planning applications in response to adoption of management zones around schools in England: A time series analysis. *Health & Place*, *87*, 103237. (SSCI)

14. Keeble, M., Adams, J., Amies-Cull, B., Chang, M., Cummins, S., Derbyshire, D., Hammond, D., Hassan, S., **Liu, B.**, Medina-Lara, A., Mytton, O., Rahilly, J., Rogers, N., Savory, B., Smith, R., Thompson, C., White, C., White, M., & Burgoine, T. (2024). Public acceptability of proposals to manage new takeaway food outlets near schools: cross-sectional analysis of the 2021 International Food Policy Study. *Cities & Health*.

15. Keeble, M., Chang, M., Derbyshire, D., White, M., Adams, J., Amies-Cull, B., Cummins, S., Hasan, S., **Liu, B.**, Medina-Lara, A., Mytton, O., Penney, T. L., Rahilly, J., Rogers, N., Savory, B., Schiff, A., Smith, R., Thompson, C., & Burgoine, T. (2024). Retailer Responses to Public Consultations on the Adoption of Takeaway Management Zones Around Schools: A Longitudinal Qualitative Analysis. International Journal of Health Policy and Management. (SCIE, SSCI)

16. He, S., Y. Chai, W. Guo, Y. Tan, and **B. Liu**. (2019). A Daily Scale Study on Women's Leisure Satisfaction and Its Influencing Factors: A Case Study of Xining. *Economic Geography*, 39(2), 224–231. (CSSCI)

17. **Liu, B.**, Chai, Y., & Tan, Y.. (2018). Research on Daily Activity Spaces of Residents in Xining City Based on Comparison of Residential Areas. *Area Research and Development*, 36(5), 152–158. (CSSCI)

18. Chai, Y., **Liu**, **B.,** Liu, Y., Ma, X., Ta, N., & Shen ,Y.. (2018). Construction and Calculation of Diagnostic Index of Urban Signs Based on Multi-Source Big Data: Case of Shanghai. *Scientia Geographica Sinica*, 38(1), 1–10. (CSSCI)

19. Yao, W., **Liu**, **B.**, Qi, F., & Xu, Q. (2018). Quantitative Research on Value of Xuanwu Lake Park in Nanjing Based on CVM and HPM. *Journal of Zhejiang Agricultural Sciences*, 59(7), 1232–1239.

20. Chai, Y., **Liu**, **B.**, & Ta, N. (2017). Comparative Study on Daily Activity Patterns of Residents in Work Unit Communities, Xining City. *Social Science Front*, (8), 163–173. (CSSCI)

21. Ellegård, K., **Liu**, **B.**, Zhang, Y. & Chai, Y. (2016). Concept of Project in Time-Geography and Its Empirical Case Studies. *Human Geography*, 31(5), 32–38. (CSSCI)

22. **Liu, B.**, & Luo, X. (2014). Research on the Model of Sustainable Development and Utilization Ancient Village Heritage: The Case of Yangliu Village in Jiangning District, Nanjing. *Agricultural History of China*, 33(4), 130–136. (CSSCI)

Book Chapter
1. Widener, M., & **Liu, B.** (2021). "Food Environments." In *International Encyclopedia of Geography: People, the Earth, Environment and Technology*, eds. D. Richardson, N. Castree, M. F. Goodchild, A. Kobayashi, W. Liu, and R. A. Marston. Oxford, UK: John Wiley & Sons, Ltd.

Thesis
1. **Liu, B.** (2022). How the Food Environment, Time Use, and Household Labour Division Influence Dietary Activities: A Case Study of Two Neighbourhoods in Toronto (Doctoral dissertation, University of Toronto).
2. **Liu, B.** (2018). Study on Individual Air Pollution Exposure and Health Effects Based on Spatiotemporal Behavior (Master's thesis, Peking University).

Selected Conference Presentations (* presenter)
1. Liu, B.*, Zhou, K., Lei, A., & Wang, L. 2024. Exploring the determinants of online meal delivery service usage in Shanghai: An integrated multi-source data analysis. In *the 18th International Association for China Planning (IACP) Conference*, Hangzhou, China, July 5-8.
2. Liu, B.* 2023. Urban food environment and dietary behavior research from the perspective of spatiotemporal behavior. In *2023 China Healthy City Science Annual Conference*, Shanghai, China, October 26-27, 2023 (Invited presentation).
3. Liu, B.*, Widener, M. & Smith, L. 2022. Integrating time use dynamics into spatial exposure to food environments: Sequence analysis of GPS trajectory data. In *the 19th International Medical Geography Symposium (IMGS)*, Edinburgh, UK, June 19-24.
4. Liu, B.*, M. Widener, and L. Smith. 2022. Understanding the household food provision activities using the time-geographic concept of "project". In *the American Association of Geographers Annual Meeting* (virtual), New York City, NY, US, February 25 – March 1 (presented on February 25).
5. Liu, B.*, Smith, L. & Widener, M. 2021. Partners' non-food-related activities and arrangement of food-related household labor: a case study of coupled adults in Toronto, Canada. In the *2021 European Colloquium on Theoretical and Quantitative Geography (ECTQG)* (virtual), Manchester, UK, November 3-5.
6. Liu, B.*, Smith, L., & Widener, M. 2021. Time use, food environments, and diet-related activities: using multi-channel sequence analysis to disentangle space, time, and food behaviours. In *Time Use Data for Health and Well Being Conference* (virtual), College Park, MD, US, June 23-25.

7. Widener, M.*, Smith, L.*, & Liu, B.*. 2021. How can time use diaries and GPS data be used to uncover the complexities of food-related behaviours? In *MoHeaP 2021: Virtual Workshop on Mobility, Health, and Place* (virtual), Zurich, Switzerland, June 22-23. (Third place in recognition of the most popular presentations)

8. Liu, B.*, Widener, M., & Smith, L. 2021. A methodological framework to explore the impacts of a partner's time use and geography on an individual's diet. In *the American Association of Geographers Annual Meeting* (virtual), Seattle, WA, US, April 07-11.

9. Widener, M., & Liu, B.*. 2019. A research framework incorporating mobility in dietary behavior research and two Canadian dietary behavior research projects. In *the 21st European Colloquium on Theoretical and Quantitative Geography (ECTQG)*, Luxembourg, September 5-9.

10. Liu, B.*, Widener, M., Burgoine, T., & Hammond, D. 2019. Associations between activity space fast food exposure and fast food consumption among young adults in Canada. In *the Association of American Geographers Annual Meeting*, Washington, D.C., US, April 3-7.

Academic Services and Membership

Journal Article Reviewer
2024 – Present, Public Health Nutrition, Cambridge University Press, SCIE
2024 – Present, Frontiers of Urban and Rural Planning, Springer Nature
2021 – Present, Urban Studies, SAGE, SSCI
2020 – Present, Environment and Planning B: Urban Analytics and City Science, SAGE, SSCI
2020 – Present, Health & Place, Elsevier, SSCI
2020 – Present, Transportation Research Board

Guest editor/editorial board member
2023 – 2024, special issue guest editor, "Urban Food Environment: Use behaviors and Planning Interventions", Urban Planning International (Top-tier planning journal in Chinese), CSSCI.
2023 – Present, editorial board member (Geography, Urban Studies), Humanities and Social Sciences Communications, Springer Nature, SSCI.

Member of Professional Associations
2024 – Present, The Geographical Society of China (GSC), Member.
2023 – Present, The Geographical Society of China (GSC), Health Geography Committee, Early-Career Board Member.
2021 – Present, International Association for China Planning (IACP), Member.
2018 – Present, Health and Medical Geography Specialty Group, Association of American Geographers (AAG), Member.
2018 – Present, Spatial Analysis and Modeling Specialty Group, Association of American Geographers (AAG), Member.
2018 – Present, Association of American Geographers (AAG), Member.

Teaching

Course instructor/guest lecturer (Tongji University)
Undergraduate: Introduction to Urbanism, Introduction to Healthy Urban Science, Urban Design (Studio), Urban Design Topics (Studio), Regulatory Detailed Planning (Studio).
Graduate: Urban Development Strategies and Policies, Comparative Studies on Urban Development in China and the US.

Tutorial instructor (University of Toronto)
Undergraduate: Tutorial instructor. Introductory Computation and Data Science for the Social Sciences (Spring 2022), Introductory Analytical Methods (Fall 2020, Fall 2019), GIS for Public Health (Spring 2019).

Awards

Shanghai Overseas High-level Talents，2023
Canada Governor General's Gold Medals Nomination，2023
China Scholarship Council Award for Outstanding Self-financed Students Abroad，2022
University of Toronto Geography & Planning International Student Award，2021
University of Toronto Geography & Planning Research Fellowship，2021
Canada Maple Leaf Board Scholarship in Food Insecurity，2020
University of Toronto Geography & Planning Recognition of Excellence Award，2019

Research Projects

1. National Natural Science Foundation of China (NNSFC) fund for early-career researchers. Research on the Spatiotemproal Exposure to the Food Environment and the Mechanisms Influencing Dietary Behavior Among Urban Residents. From 2025-01 to 2027-12. PI.
2. Tongji University - Alibaba Group New Service Research Center cooperation project. Research on the construction of digital community life circle based on on-demand delivery services – The case of Shanghai. From 2024-05 to 2025-12. PI.
3. Tongji University School of Architecture and Urban Planning new faculty research fund. Research on the physical and virtual food environments and food consumption behavior in Shanghai. From 2023-11 to 2025-10. PI.
4. National Institute for Health and Care Research (NIHR) Public Health Research Programme. Evaluation of planning policy to regulate takeaway food outlets for improved health in England. From 2021-04 to 2024-03. Postdoctoral Researcher.
5. Social Sciences and Humanities Research Council (SSHRC) Insight Grant. Time, geography, and food: how time use, social-spatial context, transportation options, and personal economics affect access to food in cities. From 2017-03 to 2024-03. Lead Graduate Student Researcher.
6. University of Toronto-Tsinghua University Joint Program Grant. Time use, activity participation, and elderly health in everyday context: A comparison between China and Canada. From 2019-10 to 2022-09. Key Graduate Student Researcher.

7. Planning and Land Resources Administration of Shanghai Municipality. Urban Sensing and Diagnosis of Shanghai and Its Implications for Decision-making. From 2016 to 2018. Lead Graduate Student Researcher, Project Coordinator.

8. NNSFC general program. Construction of Space-Behavior Interaction Theory Informed by Time Geography and Verification Research in Urban China. From 2016-01 to 2019-12. Key Graduate Student Researcher.

9. NNSFC joint research fund for overseas scholars and scholars in Hong Kong and Macao. Sino-US Comparative Research on Residents' Space-Time Behavior and Its Theoretical Innovation. From 2016-01 to 2019-12. Graduate Student Researcher.

10. NNSFC funds for international cooperation and exchange. China-Sweden Collaboration on Urban Planning Research and Education from the Perspective of Time Geography. From 2016-01 to 2018-12. Graduate Student Researcher.