

Curriculum Vitae

Hui (Henry) Luan, PhD

Department of Geography
Affiliated program: Global Health
University of Oregon
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(Updated on June 16, 2023)

Education

- 2017 **PhD** in Planning, University of Waterloo, Canada
Dissertation: Spatial and Spatio-temporal Analyses of Neighborhood Retail Food Environments: Evidence for Food Planning and Interventions
- 2011 **MSc** in Cartography and Geographical Information System, Wuhan University, China
- 2009 **BSc** in Geographical Information System, Wuhan University, China

Professional Appointment

- 2018- **Assistant Professor**
Department of Geography, University of Oregon
- 2017-2018 **Postdoctoral Fellow**
School of Human Kinetics and Recreation, Memorial University of Newfoundland
Mentor: Dr. Daniel Fuller, Canada Research Chair in Population Physical Activity
- 2011-2016 **Research & Teaching Assistant**
School of Planning & School of Public Health and Systems, University of Waterloo
- 2009-2011 **Research Assistant**
School of Resources and Environmental Sciences, Wuhan University, China

Research Interests

- Methods** GIScience; Spatial and Spatio-temporal Statistics; Bayesian Modelling; Machine Learning; Big Data Analysis
- Applications** Public Health; Epidemiology; Food Access; Urban Environments; Active Transportation; Mobile Geospatial Health Data Analysis

Publications (*: joint first authors/equal contribution; †: graduate advisee)

Published or Accepted

26. Zhang S*, **Luan H***, Kong Y, Xi G, and Zhen F. Does online food delivery improve equity of food accessibility? A case study of Nanjing, China. *Journal of Transport Geography*, 2023; 107: 103516. doi.org/10.1016/j.jtrangeo.2022.103516
25. **Luan H** and Ransome Y. County-level spatiotemporal patterns of new HIV diagnosis and pre-exposure prophylaxis (PrEP) use in Mississippi, 2014-2018: a Bayesian analysis of publicly accessible censored data. *Annals of Association of American Geographers*, 2023; 113(1):

129-148. doi.org/10.1080/24694452.2022.2080040

24. Zhou Y, Zhu L, Matyas CJ, **Luan H**, and J Tang. Assessing environmental conditions associated with spatially varying rainfall structure of North Atlantic tropical cyclones: An object-based climatological analysis. *International Journal of Climatology*. (In press) doi.org/10.1002/joc.8156
23. Ransome Y*, **Luan H***, Dean LT, Quick H, Nassau T, and Brady KA. Is race-specific neighborhood social cohesion key to reducing racial disparities in late HIV diagnosis: A multiyear ecological study. *Spatial and Spatio-temporal Epidemiology*, 2022; 42: 100508. doi.org/10.1016/j.sste.2022.100508
- Article awarded for **Health Equity Research Excellence** at Yale University
22. **Luan H** and Zhang S. Jointly modeling bus and taxi ridership: A Bayesian multivariate spatial analysis accounting for cross-ridership correlation. *Transactions in GIS*, 2022; 26(4): 2099-2119. doi.org/10.1111/tgis.12937
21. Song I† and **Luan H**. The spatially and temporally varying association between mental illness and substance use mortality and unemployment: a Bayesian analysis in the contiguous United States, 2001-2014. *Applied Geography*, 2022; 140: 102664. doi.org/10.1016/j.apgeog.2022.102664
20. **Luan H** and Fuller D. Urban form in Canada at a small-area level: quantifying “compactness” and “sprawl” with Bayesian multivariate spatial factor analysis. *Environment and Planning B: Urban Analytics and City Science*, 2022; 49(4): 1300-1313. doi.org/10.1177/23998083211062901
- The compactness index is shared at Harvard Dataverse: doi.org/10.7910/DVN/YQX0SW
19. Tobin M, Hajna S, Orychock K,..., Muhajarine N, **Luan H**, and Fuller D. Rethinking walkability and developing a conceptual definition of active living environments to guide research and practice. *BMC Public Health*, 2022; 22: 450. doi.org/10.1186/s12889-022-12747-3
18. Ransome Y, **Luan H**, Song I†, Fiellin D, and Galea S. Poor mental health days are associated with COVID-19 infection rates in the USA, *American Journal of Preventive Medicine*, 2022; 62(3): 326-332. doi.org/10.1016/j.amepre.2021.08.032
- Article featured in **Elsevier.com**, **AJPM News** pages, **EurekAlert**, and **AlphaGalileo**
17. **Luan H**, Song I†, Fiellin D, and Ransome Y. HIV infection prevalence significantly intersects with COVID-19 infection at the area-level: a USA county-level analysis. *Journal of Acquired Immune Deficiency Syndrome*, 2021; 88(2): 125-131. doi.org/10.1097/QAI.0000000000002758
16. Fuller D, Anaraki JR, Simango Bo, Rayner M, Dorani F, Bozorgi A, **Luan H**, and Basset F. Predicting lying, sitting, walking, and running using Apple Watch and Fitbit data. *BMJ Open Sport & Exercise Medicine*, 2021; 7(1): e001004. doi.org/10.7910/DVN/ZS2Z2J
15. Quick M and **Luan H**. The spatial structure of socioeconomic advantage: a Bayesian multivariate spatial factor analysis. *International Journal of Geographical Information Science*, 2021; 35(1): 63-83. doi.org/10.1080/13658816.2020.1759807
14. Fuller D, Colwell E, Low Johnathan, Orychock K, Tobin MA, Simango B, Buote R, Van Heerden D, **Luan H**, Cullen K, Slade L, and Taylor NGA. Reliability and validity of commercially available wearable devices for measuring steps, energy expenditure, and heart rate: systematic review. *JMIR mHealth and uHealth*, 2020; 8(9): e18694. [doi:10.2196/18694](https://doi.org/10.2196/18694)

13. Ransom Y*, **Luan H***, Shi X, Duncan DT, and Subramanian S.V. Alcohol outlet density and area-level heavy drinking are independent risk factors for higher alcohol-related complaints. *Journal of Urban Health*, 2019; 96(6): 889-901. doi.org/10.1007/s11524-018-00327-z
12. Hanning R, **Luan H**, Orava T, Valaitis R, Jung J, Ahmed R. Exploring Student Food Behaviour in Relation to Food Retail over the Time of Implementing Ontario's School Food and Beverage Policy. *International Journal of Environmental Research and Public Health*, 2019; 16(14): 2563. doi.org/10.3390/ijerph16142563
11. Fuller D, **Luan H**, Buote R, and Auchincloss A. Impact of a Public Transit Strike on Public Bicycle Share Use: An interrupted time series natural experiment study. *Journal of Transport & Health*, 2019; 13: 137-142. doi.org/10.1016/j.jth.2019.03.018
10. **Luan H**, Ramsay D, and Fuller D. Household income, active travel, and their interacting impact on body mass index in a sample of urban Canadians: A Bayesian spatial analysis. *International Journal of Health Geographics*, 2019; 18:4. doi.org/10.1186/s12942-019-0168-x
9. Kestens Y, Winters M, Fuller D, ..., **Luan H**, ..., Thierry B, Thigpen C, and Wasfi R. INTERACT: A comprehensive approach to assess urban form interventions through natural experiments. *BMC Public Health*, 2019; 19:51. doi.org/10.1186/s12889-018-6339-z
8. **Luan H**, Law J, and Lysy M. Diving into the consumer nutrition environment: a Bayesian spatial factor analysis of neighborhood restaurant environment. *Spatial and Spatio-temporal Epidemiology*, 2018; 24: 39-51. doi.org/10.1016/j.sste.2017.12.001
7. Perlman CM, Law J, **Luan H**, Rios S, Seitz D, Stolee P. Geographic Clustering of Admissions to Inpatient Psychiatry among Adults with Cognitive Disorders in Ontario, Canada: Does Distance to Hospital Matter?. *Canadian Journal of Psychiatry*, 2018; 63(6): 404-409. [doi:10.1177/0706743717745870](https://doi.org/10.1177/0706743717745870)
6. Quick M, Law J, and **Luan H**. The influence of on-premise and off-premise alcohol outlets on reported violent crime in the Region of Waterloo, Ontario: Applying Bayesian spatial modeling to inform land use planning and policy. *Applied Spatial Analysis and Policy*, 2017; 10(3): 435-454. doi.org/10.1007/s12061-016-9191-5
5. **Luan H**, Minaker L, and Law J. Do marginalized neighborhoods have less healthy retail food environments? An analysis using Bayesian spatial latent factor and hurdle models. *International Journal of Health Geographics*, 2016; 15:29. doi.org/10.1186/s12942-016-0060-x
4. **Luan H***, Quick M*, and Law J. Analyzing local spatio-temporal patterns of police calls-for-service using Bayesian Integrated Nested Laplace Approximation, *ISPRS International Journal of Geo-Information*, 2016; 5(9): 162. doi.org/10.3390/ijgi5090162
3. Du Q, Zhang M, Li Y, **Luan H**, Liang S, and Ren F. Spatial patterns of Ischemic Heart Disease in Shenzhen, China: A Bayesian multi-disease modeling approach to inform health planning policies. *International Journal of Environmental Research and Public Health*, 2016; 13(4): 436. doi.org/10.3390/ijerph13040436
2. **Luan H**, Law J, and Quick M. Identifying food deserts and swamps based on relative healthy food access: a spatio-temporal Bayesian approach. *International Journal of Health Geographics*, 2015; 14:37. doi.org/10.1186/s12942-015-0030-8
1. **Luan H** and Law J. Web GIS-based Public Health Surveillance Systems: A systematic review. *ISPRS International Journal of Geo-information*, 2014; 3(2):481-506. doi.org/10.3390/ijgi3020481

In Review or In Revision

- Luan H**, Li G, Duncan DT, Sullivan P, and Ransome Y. Spatial accessibility of pre-exposure prophylaxis (PrEP): different measure choices and the implications for examining its association with social determinants of health (in minor revision, *Annals of Epidemiology*)
- Luan H**, Ransome Y, Dean LT, Nassau T, and Brady K. Spatiotemporal patterns of late HIV diagnosis in Philadelphia at a small-area level: a Bayesian modelling approach accounting for excess zeros (under review, *Geographical Analysis*)
- Ransome Y, **Luan H**, Song I[†], and Duncan DT. The impact of church closings on rates of COVID-19 cases in three northeast United States cities: a structural barrier to population health (in minor revision, *Journal of Urban Health*)
- Song I[†], **Luan H**. The impact of greenspace exposure on mental illness mortality varies across space: evidence from a spatiotemporal ecological analysis in the Pacific Northwest, United States (under review, *Applied Geography*)

In Progress

- Luan H** and Ransome Y. Unintentional opioid overdose deaths in the U.S. during weekdays and weekends: a county-level shared-component analysis in the 2010s (draft completed for *Preventive Medicine*)
- Luan H**, Quick H, Sullivan P, and Ransome Y. The impacts of social determinants of health on new HIV diagnosis vary over race/ethnicity and geography (in progress)
- Ransome Y, **Luan H**, Feng X, Song I[†], Fiellin D, and Edelman J. Alcohol outlets as alternative pre-exposure prophylaxis providers: a location-allocation analysis in NYC (in progress)
- Luan H** and Zhang S. Bayesian multivariate spatiotemporal modeling of hourly bus and taxi ridership (in progress)
- Luan H** and Song I[†]. New HIV diagnosis in New York City by race/ethnicity at a small-area level: A Bayesian multivariate spatial analysis of publicly accessible interval-censored data (in progress)
- Luan H**. Modelling zero-inflated and interval-censored HIV data at a small-area level: A Bayesian approach (in progress)

Talks and Conference/Workshop Participation

Invited Talks

- 2023 **Luan H**. “Harnessing the power of spatial data science to achieve health equity”, CUNY Graduate School of Public Health & Health Policy, April 27, New York, NY, USA
- 2023 **Luan H**. “Bayesian probabilistic modeling in spatiotemporal data analysis at small-area levels”, Department of Geography, Florida State University, Jan 30, Tallahassee, FL, USA
- 2019 **Luan H**. “Bayesian spatial modeling and its applications in health and crime geography”, School of Resource and Environmental Sciences, Wuhan University, Dec 27, Wuhan, China

- 2018 **Luan H.** “Harnessing the power of probabilistic modeling in spatial data science: The application of Bayesian spatial and spatiotemporal analysis in addressing societal challenges”, Department of Geography, University of Oregon, Feb 15, Eugene, USA
- 2017 **Luan H.** “Advanced spatial analysis: Bayesian spatial statistical modeling”, School of Geodesy and Geomatics, Wuhan University, June 1, Wuhan, China
- 2017 **Luan H.** “The Healthy City movement in Canada: What can Artificial Intelligence-enabled high-definition mapping do?”, *the company of Ecopia – AI Enabled Feature Extraction* (<https://www.ecopiatech.com/>), Dec 8, Toronto, Canada.

Panel Discussant

- 2023 **Luan H.**, Nilupaer, J, Lin Y, etc. “Research Mentoring III: Quantitative Research Methods”. *American Association of Geographers Annual Meeting*, March 23-27, Denver, USA.
- 2022 Gao S, Haynes D, Li Z, **Luan H.**, Shi X, and Wang S. “Symposium on Data-Intensive Geospatial Understanding in the Era of AI and CyberGIS: CyberGIS-enabled spatial epidemiology”. *American Association of Geographers Annual Meeting*, Feb 25-March 1 (**Virtual**)
- 2017 Chuenpagdee R, Furst B, Hartt M, **Luan H.**, Lynch N, Moos M, and Tchoukaleyska R. “Creating and sustaining collaborative research networks on small and mid-sized cities”. Roundtable discussion at *Small and Adaptive Cities 2017: Sustainable futures in the urban periphery*, Sep 29, 2017, St. John’s, Newfoundland, Canada.

Conference/Symposium Presentations

- 2023 **Luan H.** and Zhang S. “Food accessibility at the walkable distance scale: a spatial statistical analysis using the Bayesian two-part log-normal model”, *American Association of Geographers Annual Meeting*, March 23-27, Denver, USA.
- 2022 **Luan H.** “The association between geographical accessibility of pre-exposure prophylaxis (PrEP) and social determinants of health: does the choice of accessibility measure matter?”, *GEOMed 2022*, October 12-14, University of California, Irvine, USA.
- 2022 **Luan H.** “A Bayesian spatiotemporal approach to analyze publicly available, censored HIV datasets in Mississippi, 2014-2018”. *American Association of Geographers Annual Meeting*, Feb 25-March 1. (**Virtual**).
- 2021 **Luan H.** “HIV infection prevalence significantly intersects with COVID-19 infection at the area-level: a USA county-level spatial analysis”. *Intersectionality and Public Health Symposium*, May 7, Chicago. (**Virtual, peer-reviewed**)
- 2020 **Luan H.** “Estimating county-level mortality rates using left-censored data: a Bayesian spatiotemporal approach”. *SPATIAL ACCURACY 2020*, July 7-10, Buffalo, USA. [**Cancelled due to COVID-19**]
- 2020 Song I[†], and **Luan H.** “Does missing data mechanism matter?: Exploring its effect on spatiotemporal data imputation accuracy”. *SPATIAL ACCURACY 2020*, July 7-10, Buffalo, USA. [**Cancelled due to COVID-19**]
- 2020 **Luan H.**, Ransome Y, Nassau T, and Brady K. “Bayesian spatiotemporal models for zero-inflated count data: Exploring the trends of late HIV diagnosis rates among Black/African American population in Philadelphia, 2010-2016”, *American*

Association of Geographers Annual Meeting, April 6-10, Denver, USA.
[Cancelled due to COVID-19]

- 2020 Song I[†] and **Luan H.** “Local explanations of individual characteristics and district-level air pollution on low birth weight in South Korea: a Bayesian network approach”. *American Association of Geographers Annual Meeting*, April 6-10, Denver, USA. [Cancelled due to COVID-19]
- 2020 Fuller D, **Luan H.**, Alfosool A, and Chen Y. “Time weighted approaches for combining GPS and area level data to create individual measures”. *American Association of Geographers Annual Meeting*, April 6-10, Denver, USA. [Cancelled due to COVID-19]
- 2019 **Luan H.** “Imputing censored health data at small-area levels: A Bayesian spatiotemporal modelling approach”, *American Association of Geographers Annual Meeting*, April 2-7, Washington DC, USA.
- 2017 **Luan H.**, Fuller D, and Dorani F. “Urban sprawl in Canada at the Census Tract level: a nationwide spatial analysis”, *Small and Adaptive Cities 2017: Sustainable futures in the urban periphery*, September 29 to October 1, St. John’s, Newfoundland, Canada.
- 2017 Minaker L, Law J, **Luan H.**, and Quick M. “Obesity, its associations with the food environment, and spatio-temporal indicators of the food environment in the Region of Waterloo, Ontario”, *Canadian Obesity Summit*, April 26-28, Banff, Alberta, Canada.
- 2017 **Luan H.**, Quick M, and Law J. “A spatial zero-inflated Poisson model for analyzing violent crime data with zero-inflation”, *American Association of Geographers Annual Meeting*, April 5-9, Boston, Massachusetts, USA.
- 2016 **Luan H.**, Law J, and Quick M. “Local spatio-temporal patterns of relative healthy food access in the Region of Waterloo, Ontario, 2011-2014”, *The Ontario Public Health Convention (TOPHC)*, April 4-6, Toronto, Canada.
- 2015 Quick M, **Luan H.**, and Law J. “The influence of alcohol outlet density on violent crime calls-to-police in Waterloo Region: A Bayesian spatial analysis”, *Canadian Association of Geographers Annual Meeting*, June 1-5, Vancouver, Canada.
- 2015 **Luan H.**, Law J, and Minaker L. “Diving into the consumer nutrition environment: a retail food environment index based on spatial Bayesian factor analysis at a small-area level”, *American Association of Geographers Annual Meeting*, April 21-25, Chicago, Illinois, USA.
- 2014 **Luan H.** and Quick M. “Is neighborhood socioeconomic status associated with fast food accessibility? A spatial analysis of the Region of Waterloo”, *Canadian Association of Geographers – Ontario Division (CAGONT)*, *Critical Human and Physical Geographies*, October 24-25, 2014, York University, Toronto, Canada.
- 2012 **Luan H.** and Law J. “Web GIS in Public Health Surveillance and Planning”, *Canadian Association of Geographers Annual Meeting*, May 28 – June 2, 2012, Waterloo, Canada.

Conference Posters

- 2023 Zhang S and **Luan H.** “Bayesian multivariate spatiotemporal modeling of bus and taxi ridership”. *The 30th International Conference on Geoinformatics*, July 19-25, London, UK.

- 2022 Song I[†] and **Luan H**. “Matching by Multivariate Similarity Matrix with Geographic Coordinates: Causal Inference of the Relationship between Residential Greenspace and Deaths by Mental Illness”. *GEOMed 2022*, October 12-14, University of California, Irvine, USA.
- 2019 Nzeyimana A[†] and **Luan H**. “Representation learning from geospatial data”, *American Association of Geographers Annual Meeting*, April 2-7, Washington DC, USA.
- 2018 Dean L, **Luan H**, Brady K, and Ransome Y. “Does bankruptcy risk predict HIV new cases? A spatio-temporal analysis of the local credit economy and HIV in Philadelphia, PA”, *Annual Meeting of Society for Epidemiologic Research*, June 19-22. Baltimore, USA.
- 2018 **Luan H**, Fuller D, Buote R, and Stanley. “User guide for big data in population and public health”, *Public Health 2018*, May 28-31, Montreal, Canada.
- 2017 **Luan H** and Ransome Y. “A Bayesian spatial versus tradition approach to characterize socioeconomic deprivation: what is the impact on public health ecological studies?”, *GeoMed 2017: International conference on spatial statistics, spatial epidemiology & spatial aspects of public health – deeper insight from big data and small areas*, September 7-9, Porto, Portugal.
- 2016 Perlman CM, Law J, Rios S, **Luan H**, Seitz D, and Stolee P. “‘Hotspots’ of Psychiatric Hospitalizations among Older Adults with Delirium, Dementia, and Cognitive Disorders in Ontario, 2011-2014”, *2016 CAHSPR Conference: A Learning Healthcare System: Let the Patient Revolution Begin!*, May 10-12, Toronto, Canada.

Workshops

- 2019 *Landscape Carbon for Atmospheric Recovery (LCSAR) Workshop*, Oct 25-27, Portland
- 2018 *Applications of Geospatial Information and Spatial Analytical Techniques in Public Health*, July 17-19, Shanghai, China
- 2018 *Food Environment Measures for Canadian Cities*, April 26-27, Toronto, Ontario, Canada.
- 2017 *Healthy Cities Research Think Tank meeting*, November 30 to December 1, Toronto, Ontario, Canada
- 2017 *The Future of Walkability Measures*, November 16-17, St. John’s, Newfoundland, Canada.

Grants and Funding

Awarded

- 2022 Ransome Yusuf (PI), **Hui Luan**, and Tyler VanderWeele. “The decline of religious institutions in U.S. neighborhoods and the impacts on population health: New empirical and theoretical approaches”, *The John Templeton Foundation*. (Role: Consultant) (\$234,748)
- 2022 **Hui Luan** (PI). “New HIV diagnosis hotspots and their associations with social determinants of health across race/ethnicity and geography: a Bayesian multivariate spatial analysis of publicly available, censored data”, *2021-2022 Vu Fellowship*, \$10,000

- 2022 **Hui Luan** (PI). “Bayesian spatial and spatiotemporal analysis using R”, *AAG summer workshop series*, \$1,750.
- 2020 **Hui Luan** (PI) and Xiaobo Su. “How does socioeconomic inequality impact opioid overdose deaths in the U.S.? A multi-scale Bayesian spatiotemporal modelling approach”, *Faculty Research Award, University of Oregon*, \$7,000
- 2020 **Hui Luan** (PI), Yusuf Ransome, and Lorraine Dean. “Integrating Spatial Data Science and Epidemiology: Bayesian spatiotemporal modeling of HIV at small area-levels in Philadelphia, 2009-2016”, funded by *the Data Science Initiative Seed Funding Program, University of Oregon*, \$50,000
- 2020 Shiloh Deitz (PI), Amy Lobben, **Hui (Henry) Luan**, Colin Koopman, and Stephen Fickas. “Free Movement: Enhancing Open Data to Facilitate Independent Travel for Persons with Disabilities”, *National Institutes for Transportation and Communities*, \$15,000. (Role: Co-investigator)
- 2019 Lucas Silva (PI), Heidi Huber-Steams, Krista McGuire, **Hui Luan**, Ryan S Walch, and Trudy Ann Cameron. “Interdisciplinary Science for Environmental and Society Security”, *Incubating Interdisciplinary Initiatives (I3) Award, University of Oregon*, \$50,000 (Role: Co-investigator)
- 2018 **Hui Luan** (PI). “Spatio-temporal statistical modeling of zero-inflated count data at a small spatial scale”, funded by the *National Science Foundation China*, ¥240,000 (~\$35,000)
- 2018 Daniel Fuller (PI), Yan Kestens, **Hui Luan**, Jeff Brook, and Meghan Winters. IPPH Planning and Dissemination Grants – “Building healthy cities”, funded by *Canadian Institutes of Health Research*, \$10,000 (Role: Co-investigator)
- 2017 **Hui Luan** (PI). “Bayesian spatio-temporal modeling of crime count data at a small-area level”, funded by *China Postdoctoral Science Foundation*, ¥50,000 (~\$8,000)

Pending

- 2023 **Hui Luan** (MPI), Yusuf Ransome (MPI), Trace Kershaw, Wenwen Li, and Tamara L. Taggart. “Leveraging extensive social determinants data and spatial data science to reduce HIV incidence across the United States Ending the HIV Epidemic (EHE) Counties”, submitted to NIH R01, *Innovations to Optimize HIV Prevention and Care Continuum Outcomes* (\$3,142,693)

In Progress

- 2023 **Hui Luan** (PI), Yusuf Ransome, and Xin Feng. “Quantifying and optimizing accessibility to pre-exposure prophylaxis and substance use treatment providers: A syndemic perspective”, targeting the *NSF HEGS*
- 2023 Yusuf Ransome (PI), **Hui Luan**, Sandro Galea. “The impact of poor mental health on COVID-19 infection and mortality across race/ethnicity at lower geographical levels in Philadelphia”, targeting *NIH R21* (Role: Co-PI)
- 2023 Han Li (PI), **Hui Luan**, Haoluan Wang, and Yao Zhou. “Climate gentrification in South Florida: A Transition Toward Urban Sustainability?” targeting the *NSF HEGS* (Role: Co-PI)

Honors and Awards

2021-22	Vu Fellow, AIDSVu.org
2020	Faculty Research Award, University of Oregon
2018	New Junior Faculty Research Award, University of Oregon
2017	The Healthy Cities Research “Think Tank” Travel Award, Canadian Institutes of Health Research
2016	Doctoral Thesis Completion Award, School of Planning, Faculty of Environment, University of Waterloo
2011-2015	International Doctoral Award, University of Waterloo

Teaching

Course instructor

University of Oregon

GEOG281: *The World & Big Data*
Winter 2019; Winter 2020; Fall 2020; Fall 2021; Spring 2022; Winter 2023

GEOG4/590: *GIS and Public Health*
Spring 2020; Spring 2021; Spring 2022; Spring 2023

GEOG4/594: *Spatial Analysis*
Spring 2019; Winter 2020; Fall 2020; Fall 2021; Winter 2023

GEOG607: *GIScience seminar – Selected topics in Spatial and Spatiotemporal Analysis*
Fall 2018; Spring 2021

Memorial University of Newfoundland

HKR6130: *Computer Applications for Physical Activity Measurement and Intervention*
Fall 2017

Teaching Assistant and Lab Instructor

University of Waterloo

PHS661: *GIS and Public Health*

PLAN418/674: *Spatial Demography*

PLAN/GEOG387: *Spatial Databases*

PLAN350: *Research Methods for Planners*

PLAN/CIVE484: *Physical Infrastructure Planning*

Mentoring

Current Student Advising

University of Oregon

Insang Song, PhD, Geography (2019- , Advisor)

Emily Doerner, MA, Geography (2023- , Research mentor)

Andrew Dickinson, PhD, Economics (2023- , Institutional representative)

Yuan Fang, PhD, Archaeology (2021- , Institutional representative)

Past Student Advising

University of Oregon

Graduate student

Bill Limpisathian, PhD, Geography, 2022 (Committee member)

Mohammad Eshghi, PhD, Geography, 2022 (Committee member)

Shiloh L. Deitz, PhD, Geography, 2021 (Committee member)

Antoine Nzeyimana, PhD, Geography, 2020 (Committee member)

Habeom Kim, PhD, Archaeology, 2020 (Institutional representative)

Undergraduate student

Mason Leavitt, BA, Geography, 2022 (Research mentor)

Malia Mulligan, BA, Geography, 2023 (Research mentor)

Memorial University of Newfoundland

Melissa Tobin, BS, Human Kinetics and Recreation, 2018 (Research mentor)

Service

Service to the discipline

Journal Boards and Editorships

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|-------|---|
| 2022- | Editorial Advisory Board, <i>Spatial and Spatio-temporal Epidemiology</i> |
| 2021 | Guest Editor, special issue “Urban Built Environment and Mental Health”,
<i>International Journal of Environmental Research and Public Health</i> |
| 2018 | Guest Editor, special issue “Methodological and Applications of Geographic
Information Science and Spatial Statistical Analysis in Public Health”,
<i>International Journal of Environmental Research and Public Health</i> |

Research Funding Agency Referee

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| 2020 | U.S. National Science Foundation (Graduate Research Fellowship Program) |
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Journal Referee

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| 2015- | International Journal of Health Geographics (15) |
| 2017- | International Journal of Environmental Research and Public Health (2) |
| | Journal of Community Psychology (2) |
| 2018- | Public Health Nutrition (4) |
| | Spatial and Spatio-temporal Epidemiology (9) |
| 2019- | ISPRS International Journal of Geo-Information |
| | Geospatial Health (2) |
| | Environment and Planning B: Urban Analytics and City Science |
| | The Professional Geographer (5) |

2020-	Transaction in GIS (2)
	Urban Studies
	BMJ Open
	Photogrammetric Engineering and Remote Sensing (PE&RS)
	Mathematician
	American Journal of Public Health
2021-	Geoscience Data Journal
	Journal of Urban Health (4)
	Journal of Studies on Alcohol and Drugs
	Drug and Alcohol Dependence
	JAMA Network Open
	The Canadian Geographer (2)
2022-	Transportation Research Part D: Transport and Environment
	Annals of Association of American Geographers
2023-	Journal of Substance Use
	BMC Medical Research Methodology
	BMC Public Health

Conference/Workshop organization

2023	Organizer and Chair of the sessions “Spatiotemporal disease mapping and analysis” in the annual meeting of AAG, 2023
2022	Organizer and Chair of the sessions “Spatiotemporal disease mapping and analysis” (I and II) in the annual meeting of AAG, 2022
2021	Session Chair, <i>Intersectionality and Public Health Symposium</i> , May 7, Chicago.
2019	Organizer and Chair of the session “Spatiotemporal disease mapping and analysis” in the annual meeting of AAG, 2019
2017	Co-organizer of the Canadian Urban Environmental Health Research Consortium (CANUE) Walkability workshop, “The Future of Walkability Measures”, November 16-17, St. John’s, NL, Canada. Small workshop with a diverse group of researchers from public health, geography, urban planning, and computer science on the conceptual and methodological development of future walkability measures

Service to the University

University of Oregon

University-level

2022	Internal grant reviewer: Incubating Interdisciplinary Initiatives (I3) Award
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Department-level

2023 -	Member, Geography Curriculum Committee
2022 -	Member, Group Mentoring Program for tenure-track and career faculty
2022 -	Liaison, School of Planning, Public Policy, and Management
2021	Member, Internal Hiring Plan Proposal (Health Geography proposal)

2021 -	Liaison, Data Science Initiative
2020	Member, Internal Hiring Plan Proposal (GeoAI proposal)
2020	Member, Diversity and Community Committee
2019	Member, New Faculty Search Committee (Remote Sensing)
2019	Peer reviewer of teaching: Web Mapping (Joanna Merson)
2019	Member, Internal Hiring Plan Proposal (Smart Cities proposal)
2018-2020	Member, Graduate Admissions Committee
2021-	

Knowledge Translation Activities

2019	GIS expert consultant to PROPUBLICA: <i>One Trump Tax Cut Was Meant to Help the Poor. A Billionaire Ended Up Winning Big</i> . Available at: https://www.propublica.org/article/trump-inc-podcast-one-trump-tax-cut-meant-to-help-the-poor-a-billionaire-ended-up-winning-big
2018	Webinar: <i>Measuring walkability and urban sprawl – Opportunities and Challenges</i> . Feb 28. Available at: http://canue.ca/measuring-walkability-urban-sprawl-opportunities-challenges/
2017	Blog: <i>Menu labeling: would it have an impact on your eating choices in a restaurant?</i> Available at: http://walkabilly.ca/home/hui-henry-luan/menu-labeling-would-it-have-an-impact-on-your-eating-choices-in-a-restaurant/

Professional Membership

2011-2017	Canadian Association of Geographers
2012-2013	Ontario Professional Planners Institute
2014-	American Association of Geographers
2018-	Society for Epidemiologic Research

Additional Training

2013	Fundamentals of University Teaching, Center for Teaching Excellence, University of Waterloo, Waterloo, Ontario
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