December 2022

HUAQING WANG

Assistant Professor huaqing.wang@usu.edu
Department of Landscape Architecture and Environmental Planning +1 (979) 326-8516
Utah State University, Logan, UT, 84322

EDUCATION

Ph.D., Urban and Regional Science, 2021.
Dissertation: "Effects of greenspace morphology on population health"
Committee: Profs. Louis Tassinary, Galen Newman, Vani Mathur, Gerard Kyle.
Graduate Certificate, Applied Statistics, Department of Statistics
Graduate Certificate, Geographic Information Science, Department of Geography
Texas A&M University, College Station, TX

MSLA., Landscape Architecture, 2012.
Thesis: "Evaluating the ecological potential of water bodies on mitigating urban flood in Beijing city."
Advisor: Prof. Kongjian Yu.
Peking University, Beijing, Mainland China

B.Eng., *summa cum laude*, Landscape Architecture, 2010.
Capstone Design: Ecological park design of the abandoned surface mine in Fushun city, China.
Advisor: Prof. Xuemei Ma.
Shenyang Jianzhu University, Shenyang, Mainland China

ACADEMIC AND PROFESSIONAL EXPERIENCE

Assistant Professor	Dept. of Landscape Architecture and Environmental Planning, Utah State University, 2022 - Present.
Lecturer	Dept. of Landscape Architecture and Urban Planning, Texas A&M University, 2021- 22.
Instructor of Record	Dept. of Landscape Architecture and Urban Planning, Texas A&M University, 2017-21.
Lab Manager	VR Lab of Urban Environments & Human Health, University of Hong Kong, 2016-17.
Landscape Analyst	Office of Land Study, Turenscape, Beijing, China, 2012-14.
Research Secretary	Coll. of Architecture and Landscape Architecture, Peking University, 2013-14. (Part-time).

TEACHING EXPERIENCE

Assistant Professor, Utah State University
LAEP3700. City and Regional Planning. Fall 2022
LAEP6930. Reading Seminar on Built Environment and Human Health. Fall 2022
LAEP6100. Regional Landscape Analysis and Planning Studio. Spring 2023

Lecturer, Undergraduate/Graduate Instructor, Texas A&M University
URPN201. The Evolving City. 2020 Fall. 2021 Fall. 2022 Spring
URPN483. Studio in Urban & Regional Sciences. 2019 Spring
PLAN624/URPN220. Digital Communication. 2017 Fall - 2018 Fall. 2021 Spring & Fall
LAND312. Landscape Design IV Studio. 2022 Spring
PLAN667. Site Planning Studio. 2022 Spring

Undergraduate Final Project Teaching Assistant, Texas A&M University
ARCH212. Social and Behavioral Factors in Design, 2015 Fall

Undergraduate Coordinator & Tutor, The University of Hong Kong
CCHU9001. Designs on the Future: Sustainability of the Built Environment, 2017 Spring

Graduate Invited Critic, Peking University
Master of Landscape Architecture for part-time students, Thesis Review, 2013 Fall

Undergraduate Teaching Assistant, Peking University
01532370. Urban Design, 2012 Fall

ADVISING EXPERIENCE

Ph.D. Advisor for Simin Gholami, Landscape Architecture & Environmental Planning, Utah State University, 2022-Present

PUBLICATIONS

Peer-Reviewed Journal Article (In English)

Wang, H., & Li, D. (2023). Emergency department visits for mental disorders and the built environment: Residential greenspace and historical redlining. *Landscape and Urban Planning*, 230, 104568. **(Impact Factor = 8.119)**

Jiang, B., He, J., Chen, J., Larsen, L., & Wang, H. (2021). Perceived Green at Speed: A Simulated Driving Experiment Raises New Questions for Attention Restoration Theory and Stress Reduction Theory. *Environment and Behavior*, 0013916520947111. **(Impact Factor = 7.124)**

Wang, H., & Tassinary, L. G. (2019). Effects of greenspace morphology on mortality at the neighbourhood level: a cross-sectional ecological study. *The Lancet Planetary Health*, *3*(11), e460-e468. **(Impact Factor = 28.750)**

Jiang, B., Wang, H., Larsen, L., Bao, F., Li, Z., & Pryor, M. (2019). Quality of sweatshop factory outdoor environments matters for workers' stress and anxiety: A participatory smartphone-photography survey. *Journal of Environmental Psychology*, *65*, 101336. **(Impact Factor = 7.649)**

Wang, H., Newman, G., & Wang, Z. (2019). Urban planning as an extension of war planning. *International Journal of Contemporary Urban Affairs*, *3*(1), 1-12.

Under Revision

Xu, W., Wang, H., Su, H., Lin, G., Pryor, M., Jiang, B. (2023). Significant but different impacts of acoustic-visual environments on residents' mental states in the high-density city.

Under Review

Wang, H., & Tassinary, L. G. Neighborhood greenspace morphology predicts morbidity risk: evidence from five independent major cities in the US.

In Preparation

Wang, H., Tassinary, L. G, Newman, G, D. A tool for evaluating the health effects of urban greenspace design based on deep learning.

Wang, H., Liu, H., Hao H., Shi, L. Association between greenspace morphology and survival of patients after heart transplant surgery.

Wang, H. Geenspace morphology associates with morbidity at the city scale.

Gholami, S., Wang, H. Greenspace morphology and human health relationships: a systematic review

Publication in other languages (Mandarin Chinese)

Peer-Reviewed Article in China Core Journals[1]

Wang, Z., Cheng, W., Wang, H. (2015). Evidence-based Restorative Environment: Research Progress and Design Inspirations. *Landscape Architecture*, 6, 030. 王志芳, 程温温, & 王华清. (2015). 循证健康修复环境:研究进展与设计启示. 风景园林, 000(006), 110-116. (Citation 8, Baidu Scholar, 09/13/2021)

Wang, H., Wang, Z., Wang, H. (2014). The Impact of Heyan Village Landscape Change on Water Environment in Chongqing. Sichuan Environment 33(1), 48-54. 王华清, 王志芳, & 王惠民. (2014). 重庆市河堰村景观改变对水环境的影响. 四川环境, 033(001), 48-54. (Citation 3, Baidu Scholar, 09/13/2021)

Article in Professional Magazine

Sun, P., Jiang, Q., Wang, Z., & Wang, H. (2013). People-oriented design solutions in urban rainwater landscapes. *Landscape Architecture Frontiers*, 1(4), 83-88. 孙鹏, 王志芳, 姜芊孜, 王华清, & 张凌. (2013). 人性化的城市雨水景观设计对策. 景观设计学, 000(004), P.83-87. (Citation 6, Baidu Scholar, 09/13/2021)

Book Chapter

Liu, X., Zhang, W., Wang, H. (2017) "Attitudes of Residents toward City Beautiful Movement Driven by Universiade" in *Edge of Shenzhen: Land and People under the Background of Spontaneous Urbanization: Landscape Sociology: A case study of Buji Neighborhood in Shenzhen*. Beijing, China: China Architecture and Building Press, 151-158. ISBN: 9787112195947. 柳小路, 张玮琪, 王华清. (2017).市民对大运会立面刷新工程的态度研究. 深圳边缘 --- 自发城镇化背景下的土地与人：景观社会学之深圳市布吉街道案例. 北京, 中国：中国建筑工业出版社, 151-158. ISBN: 9787112195947.

Wang, H. (2015). Multi-level Experience of Spanish Public Space, In Li D., Lu L., Han X. (Eds.), *Read the World's Landscape and Design on Foot - World's Architecture, City and Landscape Teaching Case*. Beijing, China: Higher Education Press, 201-209. ISBN: 9787040429923. 王华清. 西班牙城市公共空间的多层次体验. 李迪华, 路露, 韩西丽. 徒步阅读世界景观与设计 --- 世界建筑城市与景观课程教学案例之三。北京,中国： 高等教育出版社, 201-209. ISBN: 9787040429923.

PRESENTATIONS

Conference:

Wang, H., Tassinary, L.G. (2022). Greenspace morphology associated with morbidity depends on existing city conditions. *Council of Educators in Landscape Architecture*, Santa Ana Pueblo, New Mexico.

Wang, H, Li, D. (2021). Emergency department visits for mental disorders and the built environment: residential greenspace and historical redlining. *2nd World Conference on Forests for Public Health*, Virtual, online.

Wang, H., Tassinary, L.G. (2021). Greenspace morphology predicts morbidity. *The Environmental Design Research Association*, Detroit, Michigan.

Wang, H., Tassinary, L. G. (2020). The spatial distribution of green space predicts mortality at the census tract level. *Council of Educators in Landscape Architecture*, Louisville, Kentucky.

[1] The Core Journals were selected by China academic institutes based on citations, impact factor, number of reads, being indexed in the major database, and media coverage etc. Generally, it refers to a professional journal that contains a large amount of professional information and high quality, which can represent the development level of the professional discipline and is valued by readers of the field.

Jiang B., Chen, J., Wang, H., Webster, C. (2019). A Trade-off Effect: Comparing impacts of a variety of freeway landscapes on drivers' driving performance and self-reported mental status. *Council of Educators in Landscape Architecture,* Sacramento, California.

Jiang, B., Wang, H., Pryor, M., Bao, F., Sullivan, W., Webster, C. (2017). Complexity and mismatch: comparing the perception of acoustic and visual environments in the high-density city. *Council of Educators in Landscape Architecture,* Beijing, China.

Jiang, B., Bao, F., Wang, H., Pryor, M., Webster, C. (2017). Creating a mentally restorative landscape for sweatshop workers: participatory research. *Council of Educators in Landscape Architecture,* Beijing, China

Wang, H., Newman, G. D. (2017). Wars and cities: the spatial dynamics of street networks in Shenyang, China (1898-1966), *Council of Educators in Landscape Architecture,* Beijing, China.

Wang, H., Li M. (2016). 'Incomplete' green infrastructure: lessons learned from rapid urbanization in Beijing, China, *Council of Educators in Landscape Architecture*, Salt Lake City, Utah.

Wang, H., Newman, G. D. (2015). The effects of invasions and wars on the urban form: A history of Shenyang city in China, *The Association of Collegiate Schools of Planning*, Houston, Texas.

Wang Z., Wang R., Wang H., Jiang Q. (2014). The effectiveness of LID applications in condensed residential areas, *Council of Educators in Landscape Architecture*, Baltimore, Maryland.

Invited Talk:

Wang, H.(2022). Assessing health vulnerability to climate change via GIS. *Utah State University. Department of Landscape Architecture and Environmental Planning*. Logan, UT

Wang, H.(2022). Built environments and human health research. *Utah State University. Department of Landscape Architecture and Environmental Planning*. Logan, UT

Wang, H.(2021). Built environments and public health: a design-driven perspective. *Singapore University of Technology and Design. The Humanities, Arts and Social Sciences (HASS) cluster,* online.

Wang, H.(2021). Open spaces and health impact: A tool for urban design. *HKS Architects Inc. Urban Designer Group,* online.

Wang, H.(2020). Those landscape patterns that benefit ecological environments also promote public health. *Alumni Association, School of Architecture and Landscape Architecture, Peking University*, online.

Wang, H.(2020). Greenspace morphology predicts health outcomes: health-promoting landscape planning & design enriched/inspired by research. *School of Architecture, Planning and Landscape, Newcastle University (UK),* Online.

Wang, H., Tassinary, L.G. (2020). Greenspace morphology predicts health outcomes at the neighborhood level: a cross-sectional ecological study of major metropolitan areas in the United States. *College of Architecture, Texas A&M University*, College Station, Texas.

Wang, H.(2020). Dissertation research and publication: the greenspace morphology and mortality study. *Urban and Regional Science Student Organization, Texas A&M University,* College Station, Texas.

Wang, H. (2012). Landscape expression based on perception. *Landscape Architecture Students Association*, Beijing, China

Guest Lecture:

Wang, H. (2022). “Urban greenspace and human health research”. *LAEP6860 Faculty & Interdisciplinary Seminar,* Utah State University, Logan, UT

Wang, H. (2022). “Academic Job Apply: The Candidate’s View”. *LAEP7800 Introduction to the Professoriate,* Utah State University, Logan, UT

Wang, H. (2017). “The application of GIS in landscape architecture field: anything that has a meaningful location can be analyzed by GIS”. *ARCH7513 Thesis Preparation,* the University of Hong Kong, Hong Kong

GRANTS

Approved:
Utah Agricultural Experiment Station, Utah
PI, “Urban Natural Resources as Health Promoting Amenities”, 2022-27. USD $120,000 (Faculty salary and benefits in proportion to assignment, Annual operating funds, publication charges, and travel support)

In preparation:
Office of Research, Utah State University
PI, Seed Grant

ACADEMIC SERVICE

Reviewer, *Energy and Buildings,* 2019-Present
Reviewer, *Landscape and Urban Planning,* 2021-Present
Reviewer, *Urban Forestry & Urban Greening,* 2022-Present
Reviewer, *Environment and Behavior,* 2022-Present
Reviewer, *Health Sciences Review,* 2022-Present
Reviewer, *Health and Place,* 2022-Present
Reviewer, *Landscape Research Record,* 2022-Present
Reviewer, *Computational Urban Science,* 2022-Present
Reviewer, *BMC Public Health,* 2022-Present
Reviewer, Environmental Design Research Association Annual Meeting, 2021-Present
Reviewer, Council of Educators in Landscape Architecture Conference, 2020-Present
Reviewer, American Public Health Association Annual Meeting, 2020-Present

Member, Curriculum Committee – Master in Science of Environmental Planning
Member, Curriculum Committee – Ph.D. Landscape Architecture and Environmental Planning

SELECTED MEDIA COVERAGE

Forbes. (2020). *Odd-shaped parks may be better for health*. https://www.forbes.com/sites/christinero/2020/02/22/odd-shaped-parks-may-be-better-for-health/#11b59c238d70 [Accessed Sept. 10, 2020]

Medical News Today. (2019). *Parks with irregular shapes may boost longevity*.[online] Available at: https://www.medicalnewstoday.com/articles/327193.php#1 [Accessed Sept. 10, 2020]

Medical News Bulletin. (2019). *Does the shape of parks influence the health benefits of urban green space?* [online] Available at: https://medicalnewsbulletin.com/does-the-shape-of-parks-influence-the-health-benefits-of-urban-green-space/ [Accessed Sept. 10, 2020]

Medical Xpress. (2019). *Scholars find that irregularly shaped parks reduce mortality risk.* [online] Available at: https://medicalxpress.com/news/2019-11-scholars-irregularly-mortality.html [Accessed Sept. 10, 2020]

Medication Junction. (2019). *Parks with irregular shapes may boost longevity.* [online] Available at: https://www.medicationjunction.com/parks-with-irregular-shapes-may-boost-longevity/ [Accessed Sept. 10, 2020]

Knowridge Science Report. (2019). *Irregularly shaped parks may help you live longer.* [online] Available at: https://knowridge.com/2019/11/irregularly-shaped-parks-may-help-you-live-longer/ [Accessed Sept. 10, 2020]

International Business Times. (2019). *Irregularly shaped parks are good, they reduce mortality risk, say researchers.* [online] Available at: https://www.ibtimes.sg/irregularly-shaped-parks-are-good-they-reduce-mortality-risk-say-researchers-35096 [Accessed Sept. 10, 2020]

Engineering and Technology. (2019). *Scholars find irregularly shaped parks reduce mortality risk.* [online] Available at: https://eandt.theiet.org/content/articles/2019/11/scholars-find-irregularly-shaped-parks-reduce-mortality-risk/ [Accessed Sept. 10, 2020]

Sound Health and Lasting Wealth. (2019). *People who live near irregular shaped parks may survive longer than those whose are square shaped*. [online] Available at: https://www.soundhealthandlastingwealth.com/health-news/people-who-live-near-irregular-shaped-parks-may-survive-longer-than-those-whose-are-square-shaped/ [Accessed Sept. 10, 2020]

Mind Body Green. (2019). *How the shape of your local park may affect your mortality.* [online] Available at: https://www.mindbodygreen.com/articles/how-shape-of-your-local-park-may-affect-your-mortality [Accessed Sept. 10, 2020]

RESEARCH EXPERIENCE

On-Going Studies

Assistant Professor, Department of Landscape Architecture and Environmental Planning, Utah State University

PI, "High-resolution national database on the spatial morphology of vegetated land cover based on automatic remote sensing technology" Faculty Start-up Fund, Utah Agricultural Experiment Station Fund, 2022-2027. USD $120,000.

- This study aims at developing a time-efficient and computationally inexpensive method and tool to automate the vegetation land cover image classification and accuracy assessment process. The tool will be initially written by using python-programming language and then packaged into a standard alone software product. This software tool is expected to be offered free to the academic society. The long-term goal is to use such a tool to generate highly accurate one-meter high-resolution vegetation land cover data products for academic society and the public. And therefore, allowing scholars and researchers to conduct small-grain spatial analysis and studies.

PI, "Urban greenspace morphology and human health relationships: a systematic review." Faculty Start-up Fund, Utah Agricultural Experiment Station Fund, 2022-2027. USD $120,000.

- This study aims at establishing a knowledge foundation of current literature on greenspace spatial morphology and human health. Pointing out the limited number of studies and the necessity of such studies for evidence-based landscape planning and design practice for health promotion and offer a big picture regarding the potential future research directions.

PI, "Association between urban greenspace morphology and morbidity risk at the city scale." Faculty Start-up Fund, Utah Agricultural Experiment Station Fund, 2022-2027. USD $120,000.

- The objective is particularly focusing on city-scale greenspace morphology and healthy relationships to fill in the gap in the literature, as well as to ascertain whether urban greenspace planning and policy for health-promoting purposes should be considered at the city scale.

PI, "Association between urban greenspace morphology and emergency department visits due to mental health disorders." Faculty Start-up Fund, Utah Agricultural Experiment Station Fund, 2022-2027. USD $120,000.

- Neighborhood greenspace amount is associated with emergency facility utilization due to mental health problems, yet it is not clear whether greenspace morphology plays such a role in this association. This study aims at exploring such relationships, and therefore offers evidence for the spatial arrangement of greenspace in cities for optimal mental health outcomes.

Selected Completed Studies

Research Assistant, Department of Landscape and Urban Planning, Texas A&M University

Co-I, "Built environment and emergency department visits diagnoses with mental health disorders." Faculty Start-up Fund, 2021. USD $75,000

- Data processing and statistical analysis, write the first draft. One article was published.

Lab Manager, Virtual Reality Lab of Urban Environments & Human Health, The University of Hong Kong

Co-I, "Using driving simulation technology to measure impacts of freeway green landscapes on drivers' mental fatigue, stress, and negative mood." General Research Fund, 2016-2018. HKD $880,000.

- Developed experimental stimuli and lab environment. Proficient in visual stimuli generating and Logitech steering wheel-related driving simulation hardware settings. One article was published.

Co-I, "Challenge and Prospect: Exploring approaches to creating a mentally restorative working environment for manufacture industrial park." Lab Seed Fund, 2016-2017.HKD $150,000

- Participated in grant proposal writing, and designed measurement instruments. Conducted site survey and data collection. Analyzed data in Stata. One article was published.

Co-I, "Urban soundscapes: measuring interactive effects of acoustic and visual stimulations on mood and stress." University Seed Fund. 2015-2017. HKD $120,000.

- Participated in grant proposal writing and developed research design. Designed measurement instrument. Developed experimental stimuli. Conducted experiments with TSST procedure and physiological data collection (Skin Conductance, Blood Volume Pulse, Saliva Cortisol, etc.). Manuscript under preparation.

Landscape Analyst, Land Study Office, Turenscape

Co-I, "Constructing Technology of Urban Water System of the Mountainous and Highly Dense City Area: Liangjiang New District in Chongqing." National Science and Technology Fund, 2011-2013.CNY $400,000.

- Conducted site survey, interview, data analysis, and SWMM modeling. Article published.

Co-I, "A Landscape Approach to Water-adaptive Urban Construction Under Impacts of Global Climate Change" National Natural Science Foundation Fund, 2012-2015. CNY $2, 600, 000.

Conducted site survey, GIS spatial data analysis, SPSS statistical data analysis. Master's degree thesis was developed under the context of this project.

PROFESSIONAL AFFILIATION

Member, Environmental Design Research Association

Member, Council of Educators in Landscape Architecture
Member, American Planning Association
Member, Doctoral Advisory Committee, Department of Landscape Architecture and Environmental Planning, Utah State University

SOFTWARE AND SKILLS

Geographic Information Systems (Advanced ArcGIS Analysis and Python Programming)
Statistical Analysis and Machine Learning (R, Stata, SPSS, and SAS: Certified Associate)
Remote Sensing (ENVI)
Graphic & 3D modeling (Adobe Creative Suite, Auto CAD, Sketch-up, 3D Max, Revit, Rhino)
Google Earth, Open Street Map, Mapbox, etc., raster and vector spatial data open resources
Driving Simulation (CityEngine, Blender, and OpenDS)
Psychophysical measurement hardware settings & software (BioGraph Infiniti)
Office (Microsoft Office and related Visual Basic Programming)
Sound & video editing software (Adobe Audition, Premiere)

SELECTED AWARDS

Office of Graduate and Professional Studies, Texas A&M University
Dissertation Fellowship. 2019-2020 ($19200 Stipend + Tuition & Fee)
Research and Presentation Travel Award. 2020. 2021 ($500 + $120)
Professional Development Certificate. 2019. 2021

College of Architecture, Texas A&M University
Design Research for Active Living (DrAL) Scholarships. 2014. 2015 ($2000)

Department of Landscape Architecture and Urban Planning, Texas A&M University
Graduate Program Scholarship. 2017 ($1200)
Conference Travel Award. 2015. 2017 ($700)

Peking University & Lund University (Sweden)
Third Place, Gaozan Village Landscape Design Competition. 2011

Administration Office of Shenzhen University Town
Third Place, Memorial Space Design Competition of Shenzhen University Town. 2011

Peking University
Excellence Award, The 6th Chinese Landscape Architecture Graduate Works Exhibition. 2010

Liaoning Province
Government Award for Outstanding Student. 2009 (CNY $8,000)

Shenyang City Government
Outstanding University Student in Shenyang City. 2008

Shenyang Jianzhu University
Most Creative Award, Recreation Center Landscape Design Competition. 2009
First Place, Outstanding Performance in Academic Study. 2008 Spring & Fall. 2010 Spring (CNY $3,000)
Second Place, Outstanding Performance in Academic Study. 2009 Spring (CNY $500)
Third Place, Outstanding Performance in Academic Study. 2007 Spring. 2009 Fall (CNY $600)
Merit Student in Profession Award. 2010 (CNY $1000)

Excellent Student Award. 2008. 2009. 2010 (CNY $600)

CONTACT REFERENCES

Dr. Galen D. Newman
Professor
Dept. of Landscape Architecture & Urban Planning
Texas A&M University
+1 (979) 862-4320
gnewman@arch.tamu.edu

Dr. Louis G. Tassinary
Professor Emeritus
School of Performance, Visualization and Fine Arts
Texas A&M University
+1 (979) 220-4755
ltassinary@mac.com

Dr. Bin Jiang
Associate Professor
Division of Landscape Architecture
The University of Hong Kong
+852-5579-6958
jiangbin@hku.hk