HUAQING WANG, Ph.D.

Assistant Professor, Department of Landscape Architecture and Environmental Planning, Utah State University, 4005 Old Main Hill, FAV Room 258, Logan, UT, 84322. 435-797-1590 (office) <u>huaqing.wang@usu.edu</u> (email)

HIGHLIGHTS

ACADEMIC As a second-year Assistant Professor, I have successfully secured a significant NIH P20 Center Grant totaling \$3,814,815, serving as the Sub-Award PI. This project investigates the intricate relationship between climate change, urban greenspace, and population health. Additionally, I am currently working on a \$45,000 Seed Grant as the PI from the Utah Agricultural Experiment Station, focusing on establishing a high-resolution national database for the spatial morphology of vegetated land cover. My research has led to the publication of <u>influential journal articles</u>, including "Effects of greenspace morphology on mortality at the neighborhood level: a cross-sectional ecological study" in The Lancet Planetary Health—a Q1 level journal with an impact factor of 25.7. Furthermore, my contributions extend to Landscape and Urban Planning, the leading journal in Urban Studies, with multiple published papers highlighting the influence of greenspace morphology in cities on human health. My scholarly pursuits have led to the submission of a **Patent** application, currently pending, based on my study titled "Developing the Health Effect Assessment of Landscape (HEAL) Tool: Assessing the health effects of community greenspace morphology design on non-communicable diseases". **The impact** of my research has garnered attention from esteemed media outlets such as Forbes, Medical News Today, and Engineering & Technology. Moreover, discussions on Facebook, Blogs, and Twitter in English, Japanese, and Spanish underscore the widespread recognition of my work.

EDUCATION

Ph.D., Urban and Regional Science, 2021.

College of Architecture, Texas A&M University, College Station, TX Dissertation: "Effects of greenspace morphology on population health" Committee: Profs. Louis Tassinary (Advisor), Galen Newman (Co-Chair), Vani Mathur, Gerard Kyle.

Graduate Certificate, Applied Statistics, 2021.

Department of Statistics, Texas A&M University, College Station, TX

Graduate Certificate, Geographic Information Science, 2021.

Department of Geography, Texas A&M University, College Station, TX

Master of Science, Landscape Architecture, 2012.

College of Architecture & Landscape Architecture, Peking University, Beijing, China Thesis: "Evaluating the ecological potential of water bodies on mitigating urban flood in Beijing city."

Advisor: Prof. Kongjian Yu.

Bachelor of Engineering, Landscape Architecture, summa cum laude, 2010. College of Architecture & Urban Planning, Shenyang Jianzhu University, Shenyang, China Capstone Design: "Ecological park design for abandoned surface mine in Fushun City" Advisor: Prof. Xuemei Ma.

APPOINTMENTS

ACADEMIC 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, Virtual Reality Lab of Urban Environments & Human Health, University of Hong Kong, 2016-17.

Landscape Analyst, Office of Land Study, Turenscape, Beijing, China, 2012-14. (Part-

Research Secretary, College of Architecture and Landscape Architecture, Peking University, 2012-14. (Part-time)

PUBLICATIONS

PEER-REVIEWED Peer-Reviewed Journal Articles

- 1. Wang, H., Tassinary, L. G., & Newman, G. D. (2024). Developing the health effect assessment of landscape (HEAL) Tool: Assessing the health effects of community greenspace morphology design on non-communicable diseases. Landscape and Urban Planning, 244, 104990.
- 2. Wang, H., & Tassinary, L. G. (2024). Association between greenspace morphology and prevalence of non-communicable diseases mediated by air pollution and physical activity. Landscape and Urban Planning, 242, 104934.
- 3. Xu, W., Wang, H., Su, H., Sullivan, W. C., Lin, G., Pryor, M., & Jiang, B. (2024). Impacts of sights and sounds on anxiety relief in the high-density city. Landscape and Urban Planning, 241, 104927.
- 4. Hao, H., Yoo, S.R., Strickland, M.J., Darrow, L.A., D'Souza, R.R., Warren, J.L., Moss, S., Wang, H., Zhang, H. and Chang, H.H. (2023). Effects of air pollution on adverse birth outcomes and pregnancy complications in the US state of Kansas (2000– 2015). Scientific Reports, 13(1), 21476.
- 5. 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.
- 6. 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.
- 7. 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.

- 8. 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.
- 9. **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.

Book Chapters

10. Wang, H., & Tassinary, L. G. (2023). Demographic Data in the Built Environment and Human Health Studies (A scoping review). In Parfait M Eloundou-Enyegue (Eds). Trends in Demographic Data. IntechOpen. DOI: 10.5772/intechopen.1002670

Articles Under Review

- Wang, H., Gholami, S., Samavatekbatan, A., Xu, W., Sleipness, O., Tassinary, L. (2024). Where and how to invest in greenspace for optimal health benefits? A systematic review of greenspace morphology and human health relationships. (Submitted to The Lancet Planetary Health, under first round revision as of March 28, 2024)
- 2. **Wang H.**, Huang X., Hao, H., Chang, H. H. (2024). Greenspace Morphology and Preterm Birth: A State-Wide Study in Georgia, United States (2001–2016). (Submitted to Environmental Health Perspectives, under first round revision as of April 09, 2024)

Articles In Preparation

- 1. Wang, H., Evans, D., Chamberlain, B. Greenspace morphology associates with morbidity at the city scale.
- 2. Wang, H., Li, D. Greenspace morphology and emergency department visits due to mental health.
- 3. Chen, S., Wang, H. Greenspace, birth richness, and mental health.
- 4. Wang, H., Clevenger, K. Greenspace morphology and physical activity: A national scale study.
- 5. Wang, H., Liu, H., Hao H. Association between greenspace morphology and survival of patients after heart transplant surgery.

Publications in other languages (Mandarin Chinese) Peer-Reviewed Article in China Core Journals

11. 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 11, Baidu Scholar, 10/20/2023)

12. 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, 12/26/2023)

Article in Professional Magazine

13. 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 7, Baidu Scholar, 10/20/2023)

Book Chapter

- 14. 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.
- 15. 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.

Peer-reviewed published abstracts: oral presentations

- Wang H., Li D. (2024). Greenspace morphology and emergency department visits due to mental disorder. *Environmental Design Research Association*, Portland, Oregon. (Accepted, expected June 2024)
- 2. **Wang H.**, Huang X., Hao, H., Chang, H. H. (2024). Greenspace morphology and preterm birth: A state-wide study in Georgia, United States (2000-2016). *36th Annual Conference of the International Society for Environmental Epidemiology*, Santiago, Chile. (Submitted as of Feb. 14, 2024, expected August 2024)
- 3. **Wang, H.** (2024). Taking action: At which scale for health promotion? *Council of Educators in Landscape Architecture*, St. Louis, Missouri.
- 4. **Wang, H.** (2023). Greenspace morphology and human health relationships: a systematic review of quantitative studies. *The 3rd World Conference on Forests for Public Health*, Sherbrook, Quebec, Canada.

- 5. **Wang, H.,** Li, D. (2023). Greenspace and redlining housing policy are associated with emergency healthcare facility utilization due to mental disorders. *The 17th International Association for China Planning Annual Conference*. Tianjin China, online.
- Wang, H., Tassinary, L.G. (2023). A machine learning tool to assess the health effect of community greenspace design. *Council of Educators in Landscape Architecture*, San Antonio, Texas.
- 7. 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.
- 8. **Wang, H,** Li, D. (2021). Emergency department visits for mental disorders and the built environment: residential greenspace and historical redlining. The 2nd World Conference on Forests for Public Health, Virtual, online.
- 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.
- 10. 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.
- 11. 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 a high-density city. *Council of Educators in Landscape Architecture*, Beijing, China.
- 12. 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
- 13. **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.
- 14. **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.
- 15. **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.

16. 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.

Peer-reviewed published abstracts: poster sessions

- 17. Gholami, S., Samavatekbatan, A., **Wang, H.** (2024). Greenspace morphology and physical activity: a systematic review and meta-analysis. *Council of Educators in Landscape Architecture*, St. Louis, Missouri.
- 18. Hoover J., Arora M., Billheimer D., Beamer P., Furlong M., Keith L., Li D., Lim C., Liu Y., Roman-Palacios C., Waller M., **Wang H.,** Ernst K. (2024). Launching the Southwest Center on Resilience for Climate Change and Health. *Partnerships for Environmental Public Health. National Institute of Environmental Health Sciences*. Durham, North Carolina.
- 19. **Wang, H.,** Gholami, S. (2023). Association between women-only parks and women's mortality in Tehran-Iran under Muslim cultural contexts. *Council of Educators in Landscape Architecture*, San Antonio, Texas. (**Best Poster Award Winner**)
- 20. **Wang, H.,** Tassinary, L.G. (2021). Greenspace morphology predicts morbidity. *The Environmental Design Research Association*, Detroit, Michigan.

FUNDING & GRANTS

FUNDING & Grants Got Funded

- PI Wang H. (\$45,000). High-resolution national database on the spatial morphology of vegetated land cover based on automatic remote sensing technology. Seed Grant, *Utah Agricultural Experiment Station*, 2023-2025.
 - 2. **Sub-Award PI Wang H**. (\$3,814,815). Greenspace for public health under climate change: The good, the bad, and the future. *National Institutes of Health*. Exploratory Grants for Climate Change and Health Research Center Development, 2023-2026.

Grant Submitted

- PI Wang H, Christensen K, Chamberlain, B, Clevenger K, Dai X. A Natural Experiment Study on Infrastructural Discrimination: Identifying Cost-Effective Greenspace Morphology for Enhancing the Health of Individuals with Disabilities. National Institutes of Health. Addressing the Impact of Structural Racism and Discrimination on Minority Health and Health Disparities. (Submitted Oct. 10, 2023)
- 2. **Senior Personal** Hao H, Chang H, Quyyumi A, Chandrasekaran S, **Wang H**, Liu Y. Effects of Greenspace Morphology on Cardiovascular Disease and Its Risk Factors. *HERCULES Exposome Research Center (NIEHS P30 ES019776)*. Environmental Health Pilot Grants. (Submitted January 31st, 2024).
- **PATENT** 1. **Wang H.,** Tassinary L. (2023). Assessing Health Effects of Landscape Designs. US. Application number: 18/400,061. (*Pending*)

MEDIA COVERAGE

- **SELECTED** 1. InSites Magazine. (2023). Huaqing Wang and Simin Gholami won the Best Poster at the 2023 CELA Conference. https://mailchi.mp/b501b0a0c5b6/insites-e-letter-spring-2023?e=baec1e4c45 [Accessed June. 24, 2023]
 - 2. Forbes. (2020). *Odd-shaped parks may be better for health.* https://www.forbes.com/sites/christinero/2020/02/22/odd-shaped-parks-may-bebetter-for-health/#11b59c238d70 [Accessed Sept. 10, 2020]
 - 3. 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]
 - 4. Medical News Bulletin. (2019). Does the shape of parks influence the health benefits of urban green space? [online] Available at: https://medicalnewsbulletin.com/does-theshape-of-parks-influence-the-health-benefits-of-urban-green-space/ [Accessed Sept. 10, 2020]
 - 5. Medical Xpress. (2019). Scholars find that irregularly shaped parks reduce mortality risk. [online] Available at: https://medicalxpress.com/news/2019-11-scholarsirregularly-mortality.html [Accessed Sept. 10, 2020]
 - 6. Medication Junction. (2019). Parks with irregular shapes may boost longevity. [online] Available at: https://www.medicationjunction.com/parks-with-irregularshapes-may-boost-longevity/ [Accessed Sept. 10, 2020]
 - 7. Knowridge Science Report. (2019). Irregularly shaped parks may help you live longer. [online] Available at: https://knowridge.com/2019/11/irregularly-shaped-parks-mayhelp-you-live-longer/ [Accessed Sept. 10, 2020]
 - 8. 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-mortalityrisk-say-researchers-35096 [Accessed Sept. 10, 2020]
 - 9. 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-shapedparks-reduce-mortality-risk/ [Accessed Sept. 10, 2020]
 - 10. 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-nearirregular-shaped-parks-may-survive-longer-than-those-whose-are-square-shaped/ [Accessed Sept. 10, 2020]

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

TEACHING Utah State University

EXPERIENCE <u>LAEP3700</u>. City and Regional Planning.

(Fall 2022, Fall 2023)

Instructor, Major course redesign

This course provides an in-depth exploration of key concepts, theories, and practices in the field of city and regional planning. The course is designed to align with the American Institute of Certified Planners (AICP) certification exam content, ensuring students gain a comprehensive understanding of urban planning principles and practices.

LAEP6100. Regional Landscape Analysis and Planning Studio.

(Spring 2023)

Instructor, Major course redesign

This studio focuses on landscape infrastructure planning and design ranging from regional scale, community scale, to streetscape scale. The class will guide students through the complete process of landscape planning. Start with site analysis, regional green infrastructure planning, community central park, street scale stormwater management landscape design, all the way to the master plan development, cross sections, perspectives, diagramming a rendering, and final poster. Along the way, planning methods, design examples, and graphic drawing examples are introduced.

LAEP 6210. Bioregional Management and Policy Design Studio.

(Spring 2024)

Co-Insturctor

This studio focuses on an assessment of land-use policies across landscapes and time, with an emphasis on evaluating the consequences of community growth via the generation and analysis of future development and management alternatives. During the Spring 2024 semester, the project is centered on a tree planting initiative by the US Forest Services, targeting census tracts in Utah identified as disadvantaged communities. Students delve into tree planting options, considering climate, hydrology, heat, health, biodiversity, and social factors, and explore their potential impact on future development.

LAEP6930. Reading Seminar on Built Environment and Human Health.

(Fall 2022)

Instructor, Major course redesign

This seminar provides a thorough investigation of the interplay between the built environment and human health, encompassing areas such as mental health, physical activity, mortality, morbidity, and more. Throughout this course, students will gain insight into a range of research designs and methodologies commonly employed in this field. These approaches encompass experimental and observational studies, cross-sectional and longitudinal analyses, cohort investigations, systematic reviews, meta-analyses, and umbrella reviews.

LAEP6930. Reading Seminar on Landscape and Environmental Planning.

(Fall 2023)

Instructor, Major course redesign

This seminar offers a comprehensive exploration of the landscape and environmental topics including crime, transportation, health, home ownership, stormwater management, policy, food access, physical activity, etc. This course will guide students through an engaging journey of theories, mechanisms, mediating and moderating factors, literature structure, and research design types that underpin this field.

LAEP7940. Review of Literature.

(Spring 2023)

One of Multiple Instructors

This course provides students with the fundamentals of conducting a literature review. It covers various types of literature reviews, the steps involved in conducting these reviews, techniques for screening literature, offers examples of reviews, and requires students to complete hands-on assignments for conducting their literature review in the field of landscape and environmental planning. I offered lectures and materials regarding the analysis and categorization of literature.

LAEP7910. Conference Presentation.

(Spring 2024)

Instructor

This course is designed to provide doctoral students with comprehensive guidance on the entire process of preparing, refining, participating in, and critically assessing their conference presentations and performances. This course aims to equip students with the skills and knowledge necessary to excel in the dynamic and often demanding environment of academic conferences. Through practical exercises, constructive feedback sessions, and a focus on refining presentation techniques, students will gain the confidence and expertise needed to showcase their research and ideas with impact and clarity in various academic and professional forums.

LAEP 7800. Introduction to the Professoriate.

(Fall, 2022)

Guest Lecturer

Students will learn about key aspects of the academic career path, gain a professional orientation to faculty roles, and develop strategies and materials for pursuing academic positions before graduation. Ultimately, this course fosters the mindset and professional understanding necessary for success in academia. I offered a lecture titled "Academic Job Apply: The Candidate's View".

LAEP 6860. Faculty & Interdisciplinary Seminar.

(Fall, 2022, 2023)

Guest Lecturer

This seminar is intended to be an environment for new graduate students in the Department of Landscape Architecture and Environmental Planning (LAEP). Grad students will engage in a dialogue with LAEP faculty concerning their scholarship and interests in the field. I offered a lecture titled "Urban Greenspace and human health research".

Texas A&M University

URPN201. The Evolving City.

(2020 Fall. 2021 Fall. 2022 Spring)

Instructor

This course introduces the history of contemporary urban and regional planning and how the evolving forms of cities and regions pose opportunities and/or challenges for planners, understanding key social, economic, political, and technological forces that shape city form and function and its ramifications for urban and regional planning.

URPN483. Studio in Urban & Regional Sciences.

(2019 Spring)

Instructor

This studio introduces the confluence of ecological, environmental, economic, social, cultural, and political forces impacting the planning, design, and development of complex urban environments, site planning, design process, and sustainability.

PLAN624/URPN220. Digital Communication.

(2017 Fall - 2018 Fall. 2021 Spring & Fall)

Instructor. Major course redesign

Applications of computer graphics, rendering, and visualization software in urban design, landscape architecture, and environmental analysis; introduction to basic concepts and principles of graphic composition; rendering, visualization, and linkages to landscape-referenced data.

LAND312. Landscape Design IV Studio.

(2022 Spring)

Instructor

Continuation of LAND 311; land design projects of increased complexity and emphasis on sustainability, with site scale problems used to demonstrate complete design thought. One or more field trips may be required.

PLAN667. Site Planning Studio.

(2022 Spring)

Instructor. Major course redesign

Introduction to physical planning and design aspects of city planning; the relationship between urban design and city/regional planning; the history of design paradigm; essential tools and applications for physical planning; and site planning and design of physical attributes.

ARCH212. Social and Behavioral Factors in Design.

(2015 Fall)

Final Project Teaching Assistant

This course introduces social and behavioral factors in the built and natural environment; environmental perception and spatial cognition; social-environmental processes such as privacy and crowding; setting-oriented discussion on residences, education, and the

workplace; the psychology of nature and natural resource management; social design and social science contribution to architectural design.

The University of Hong Kong

CCHU9001. Designs on the Future: Sustainability of the Built Environment. (2017 Spring) Teaching Assistant

This course is intended to inspire thinking about the way we should construct our future living environments to find the most sustainable balance. It explores the United Nation's Sustainable Development Goals (SDGs) as they apply to Hong Kong, addressing issues of population and urbanization, materials resources, and human systems, as a way of understanding what a sustainable future might look like.

ARCH7513 Thesis Preparation

(2016 Fall)

Guest Lecturer

This course introduces students to topics, tools, methods, and design of thesis study. I offered a lecture titled "The application of GIS in the landscape architecture field: anything that has a meaningful location can be analyzed by GIS".

Peking University

Thesis Review

(2013 Fall)

Invited Critic

For Master students in Landscape Architecture. Offer a rigorous evaluation, assessing the quality of research, design concepts, and their relevance to the discipline. This review provides students with constructive feedback and ensures their work meets the highest academic and professional standards.

01532370. Urban Design Studio

(2012 Fall)

Teaching Assistant

This studio guides students in tackling real-world challenges, refining their design skills, and collaborating on innovative solutions for urban environments. Through hands-on projects and feedback from experienced instructors, students gain valuable insights into the complexities of shaping modern cities.

SERVICE

ACADEMIC 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, Sustainable Cities and Society, 2023-Present

Reviewer, BMJ, 2023-Present

Reviewer, Land, 2024-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:

- 1. Master of Science in Environmental Planning, Utah State University
- 2. Ph.D. Landscape Architecture and Environmental Planning, Utah State University

MENTORING

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

Ph.D. Dissertation Committee Member for David Evans, Landscape Architecture & Environmental Planning, Utah State University, 2023-Present

Ph.D. Dissertation Committee Member for Doo Hong Lee, Landscape Architecture & Environmental Planning, Utah State University, 2023-Present

Master (Environmental Planning), Advisor, for Emily Aase, Landscape Architecture & Environmental Planning, Utah State University, 2024-Present

PROFESSIONAL AFFILIATION

Member, American Geophysical Union, GeoHealth Channel

Member, Environmental Design Research Association

Member, Council of Educators in Landscape Architecture

Member, American Planning Association

Member, Association of Collegiate Schools of Planning

- **INVITED TALK** 1. Wang, H. (2024). Play space and cultural space design in landscape and city planning. University of Cincinnati. School of Planning. Online.
 - 2. Wang, H.(2022). Assessing health vulnerability to climate change via GIS. Utah State University. Department of Landscape Architecture and Environmental Planning. Logan, UT
 - 3. Wang, H.(2022). Built environments and human health research. Utah State University. Department of Landscape Architecture and Environmental Planning. Logan, UT
 - 4. 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.
 - 5. 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.
- 7. 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.
- 8. 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.
- 10. Wang, H. (2012). Landscape expression based on perception. Landscape Architecture Students Association, Beijing, China

RESEARCH EXPERIENCE

RESEARCH On-Going Studies

EXPERIENCE 1. **Sub-Award PI,** "Greenspace for public health under climate change: The good, the bad, and the future." <u>National Institutes of Health. P20. Exploratory Grants for Climate Change and Health Research Center Development. \$3,814,815.</u>

This study aims to examine how urban greenspace designs can increase climate change resilience and public health.

 PI, "High-resolution national database on the spatial morphology of vegetated land cover based on automatic remote sensing technology" <u>Seed Grant, Utah Agricultural Experiment Station</u>, 2023-2025. \$45,000.

This study aims to develop a time-efficient and computationally inexpensive method and tool to automate the vegetation land cover image classification and accuracy assessment process.

3. **PI**, "Urban greenspace morphology and human health relationships: a systematic review." <u>Faculty Start-up Fund</u>, <u>Utah Agricultural Experiment Station Fund</u>, <u>2022-2027</u>. \$120,000.

This study aims at establishing a knowledge foundation of current literature on greenspace spatial morphology and human health.

4. **PI**, "Association between urban greenspace morphology and morbidity risk at the city scale." <u>Faculty Start-up Fund</u>, <u>Utah Agricultural Experiment Station Fund</u>, <u>2022-2027</u>. \$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.

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

This study aims to explore such relationships and offers evidence for the spatial arrangement of greenspace in cities for optimal mental health outcomes.

Selected Completed Studies

- 1. **Co-I**, "Built environment and emergency department visits diagnoses with mental health disorders." Faculty Start-up Fund, Texas A&M University, 2021. USD \$75,000
- 2. **Co-I**, "Using driving simulation technology to measure impacts of freeway green landscapes on drivers' mental fatigue, stress, and negative mood." General Research Fund, Hong Kong, 2016-2018. HKD \$880,000.
- 3. **Co-I**, "Challenge and Prospect: Exploring approaches to creating a mentally restorative working environment for manufacture industrial park." Lab Seed Fund, The University of Hong Kong, 2016-2017. HKD \$150,000
- 4. **Co-I**, "Urban soundscapes: measuring interactive effects of acoustic and visual stimulations on mood and stress." University Seed Fund, The University of Hong Kong, 2015-2017. HKD \$120,000.
- 5. **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, Mainland China, 2011-2013. CNY \$400,000.
- Co-I, "A Landscape Approach to Water-adaptive Urban Construction Under Impacts of Global Climate Change" National Natural Science Foundation, Mainland China, 2012-2015. CNY \$2, 600, 000.

SELECTED International Student Council, Utah State University AWARDS Hero Award. 2023

Council of Educators in Landscape Architecture Best Poster Award. 2023 (\$500)

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)

SOFTWARE AND SKILLS

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