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School of Planning, Design & Construction, Michigan State University
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EDUCATION

- Ph.D. **Urban and Regional Sciences, Department of Landscape Architecture and Urban Planning, Texas A&M University, College Station, TX, 2019**
Dissertation: The Impact of Climate and Land Use on Urban Stormwater Runoff and Implication for Low Impact Development and Green Infrastructure
- MLA **Department of Landscape Architecture and Urban Planning, Texas A&M University, College Station, TX, 2015**
Thesis: Low Impact Development for Impervious Surface Connectivity Mitigation – Assessment of Directly Connected Impervious Area (DCIA) in the Energy Corridor District, Houston, TX
- Certificate **Sustainable Urbanism Certificate, Texas A&M University, College Station, TX, 2015**
- BS **Department of Landscape Architecture and Rural Systems Engineering, Seoul National University, Seoul, South Korea, 2011**
Honors: Summa Cum Laude

ACADEMIC & PROFESSIONAL WORK EXPERIENCE

- 2019-Present **Assistant Professor**, Landscape Architecture Program, School of Planning, Design and Construction, Michigan State University, East Lansing, MI
- 2013-2019 **Instructor** (2016-2019); **Teaching Assistant** (2015); **Graduate Assistant** (2013-2014), Department of Landscape Architecture and Urban Planning, Texas A&M University, College Station, TX
- 2010-2012 **Research Assistant**, Landscape Ecology and Climate Change Adaptation Laboratory, Seoul National University, Seoul, South Korea

HONORS & AWARDS

External Honors & Awards

During Career as a Faculty Member in MSU (2019-Present)

- 2024 **CELA Excellence in Research & Creative Work - Junior Level**
Council of Educators in Landscape Architecture (CELA)
- 2023 **President's Award**
National Association of State Park Directors
- 2021-2022 **CELA Academy of Fellows Outstanding Poster Award**
- **2022 - Best Poster Award:** "Landscape Performance Research to Enhance Resilience of a Vulnerable Community in Michigan," Kim, J.-H., O'Keefe, P., **Sohn, W.**, and Kotval-Karamchandani, Z.
 - **2021 - Best Poster Award:** "Developing a Revitalization Planning and Design Guideline for Enhancing Land Use Performance of a Shrinking City," Kim, J.-H., Yang, S., **Sohn, W.**,

and Kotval-Karamchandani, Z.

Prior to Faculty Member Position (Before 2019)

- 2016-2017 **CELA Academy of Fellows Outstanding Poster Award**
- **2017 – Honorable Mention:** “A system-oriented design approach for urban revitalization: Transit hub and mixed-use development in the Energy Corridor District, Houston, Texas, USA,” **Sohn, W.**, Kim, J.-H., Ning, S., and Kim, Y.
 - **2016 – Best Poster Award:** “Design Assessment for Sustainable Hydrologic System Development Using a Systematic Framework,” **Sohn, W.**, Kim, J.-H., and Newman, G.
- 2015 **ASLA Student Merit Award**
American Society of Landscape Architects (ASLA)
- 2014 **University Olmsted Scholar**
Landscape Architecture Foundation (LAF)
- 2013-2014 **Texas ASLA Student Design Competition Awards**
Texas Chapter of the American Society of Landscape Architects (TxASLA)
- **2014 – Merit Award:** “Eco-Radiation of Cross Creek Ranch: A System-Oriented Community,” **Sohn, W.**, Zhang, Y., Wang, Y., and Li, Z.
 - **2014 – Merit Award:** “Infiltr[Action]: Groundwater Infiltration as a SmartWater Use Strategy,” **Sohn, W.**, Guo, R., and Su, X.
 - **2013 – Honorable Mention:** “Healing Veterans with Honor,” **Sohn, W.**, Danielson, D., LaCroix, R., and Garcia, V.
- 2010 **Design Award – Honorable Mention**
7th National Exhibition of Korean Landscape Architecture, Seoul, South Korea
- “1.7% Interfacing,” **Sohn, W.**, Jang, Y., and Choi, S.
- National Science & Technology Scholarship**
Korea Student Aid Foundation, Seoul, South Korea
- 2007; 2009 **External Scholarships for Academic Excellence and Achievement**
Korea Student Aid Foundation, Seoul, South Korea

Internal Honors & Awards

Prior to Faculty Member Position (Before 2019)

- 2017-2018 **Schob Nature Preserve Scholarship**
Dept. of Landscape Architecture and Urban Planning, Texas A&M University, College Station, TX
- 2017 **GIS Day Poster Award – Audience Favorite Prize**
Texas A&M University Libraries, College Station, TX
- “Landscape Water Budget Tool,” Lewis, A., Higgins, K., Potts, G., Rose, R., Noble, J., and **Sohn, W.**
- 2016-2017 **Urban and Regional Science Doctoral Departmental Scholarship**
Dept. of Landscape Architecture and Urban Planning, Texas A&M University, College Station, TX
- 2015-2016 **University Top-Off Scholarship**
Texas A&M University, College Station, TX
- 2014-2015 **Landscape Architecture Development Scholarship**
Dept. of Landscape Architecture and Urban Planning, Texas A&M University, College Station, TX
- Department Head Award - Department Head Prize**
Dept. of Landscape Architecture and Urban Planning, Texas A&M University, College Station, TX
- 2013-2014 **Gene Schrickel Jr. '50 Endowed Scholarship**

- 2011 Dept. of Landscape Architecture and Urban Planning, Texas A&M University, College Station, TX
Summa Cum Laude
 College of Agriculture and Life Science (CALs), Seoul National University, Seoul, South Korea
The Best Honor Graduate & Grand Prize
 Dept. of Landscape Architecture and Rural System Engineering, Seoul National University, Seoul, South Korea
CALS Study Abroad Scholarship
 College of Agriculture and Life Science (CALs), Seoul National University, Seoul, South Korea
- 2008; 2009 **University Scholarships for Academic Excellence and Achievement**
 Seoul National University, Seoul, South Korea

RESEARCH EXPERIENCE

PUBLICATIONS

Peer-reviewed Journal Articles (Denotes *advisee, **student collaborator, †Recommended journal by the Program)

1. Xu, Z.* and **Sohn, W.** (2024). A Longitudinal Comparison of Flooding Mechanisms in Growing and Shrinking Regions: Evaluating Changes in Impervious Composition and Green Infrastructure Connectivity. *Urban Climate*. 55(101875). [<https://doi.org/10.1016/j.uclim.2024.101875>]. Impact Factor (IF): 6.4
2. **Sohn, W.**, and Kotval-Karamchandani, Z. (2023). Risk Perception of Compound Emergencies: A Household Survey on Flood Evacuation and Sheltering Behavior during the COVID-19 Pandemic. *Sustainable Cities and Society*. 94(104553). [<https://doi.org/10.1016/j.scs.2023.104553>]. IF: 11.7
3. Park, S.**, **Sohn, W.**, Piao, Y.**, and Lee, D. (2023). Adaptation Strategies for Future Coastal Flooding: Performance Evaluation of Green and Grey Infrastructure in South Korea. *Journal of Environmental Management*. 334 (117495). [<https://doi.org/10.1016/j.jenvman.2023.117495>]. IF: 8.7
4. Ding, Y.**, Lee, C., Chen, X.**, Song, Y., Newman, G., Lee, R.J., Lee, S., Li, D., and **Sohn, W.** (2023). Exploring the Association Between Campus Environment of Higher Education and Student Health: A Systematic Review of Findings and Measures. *Urban Forestry and Urban Greening*. 91(128168), 1-13. [<https://doi.org/10.1016/j.ufug.2023.128168>]. IF: 6.4
5. Bodea, A.**, Kim, J.-H., **Sohn, W.**, and Durst, N. (2023). Applying Ecological Principles of Design for Restoring Brownfields: A Case Study in River Rouge, MI. *Journal of People, Plants, and Environment*. 26(5), 445-454. [<https://doi.org/10.11628/ksppe.2023.26.5.445>].
6. Song, Y., Lee, C., Tao, Z.**, Lee, R., Newman, G., Ding, Y.**, Jessica, F., and **Sohn, W.** (2023). COVID-19 and Campus Users: A Longitudinal and Place-Based Study of University Mobilities in Texas. *Sustainable Cities and Society*. 96(104656). [<https://doi.org/10.1016/j.scs.2023.104656>]. IF: 11.7
7. Shevela, B.**, Kim, J.-H., **Sohn, W.**, and Durst, N. (2022). The Reclamation of an Industrial Site and Design Impacts on Environmental, Social, and Economic Resilience. *Journal of People, Plants, and Environment*. 25(2), 123-132. [<https://doi.org/10.11628/ksppe.2022.25.2.123>].
8. Woodruff, S., Bae, J.**, **Sohn, W.**, Newman, G., Tran, T.**, Lee, J.**, Wilkins, C.**, Van Zandt, S., and Ndubisi, F. (2022). Planning, Development Pressure, and Change in Green Infrastructure Quantity and Configuration in Coastal Texas. *Land Use Policy*. 114(105893), 1-11. [<https://doi.org/10.1016/j.landusepol.2021.105893>]. IF: 7.1
9. Park, J., Kim, J.-H., **Sohn, W.**, and Li, M.-H. (2022). Cooling Ranges for Urban Heat Mitigation: Continuous Cooling Effects along the Edges of Small Greenspaces. *Landscape and Ecological Engineering*. 18(1), 31-43. [<https://doi.org/10.1007/s11355-021-00481-8>]. IF: 2.2

10. **Sohn, W.**, Bae, J.** , and Newman, G. (2021). Green Infrastructure for Coastal Flood Protection: The Longitudinal Impacts of Green Infrastructure Patterns on Flood Damage. *Applied Geography*. 135(102565), 1-11. [<https://doi.org/10.1016/j.apgeog.2021.102565>]. IF: 4.9
11. Bae, J.** , **Sohn, W.**, Newman, G., Gu, D., Woodruff, S., Van Zandt, S., Ndubisi, F., Wilkins, C.** , Lee, J.** , and Tran, T.** (2021). A Longitudinal Assessment of Green Infrastructure Quantity and Quality in Coastal Texan Cities. *Urban Forestry and Urban Greening*. 65(127315), 1-12. [<https://doi.org/10.1016/j.ufug.2021.127315>]. IF: 6.4
12. Park, J., Kim, J.-H., **Sohn, W.**, and Lee, D.-K. (2021). Cooling Factors: Do Small Greenspaces Outperform Building Shade in Mitigating Urban Heat Island Effects? *Urban Forestry and Urban Greening*. 64(127256), 1-11. [<https://doi.org/10.1016/j.ufug.2021.127256>]. IF: 6.4
13. **Sohn, W.**, Brody, S., Kim, J.-H., Li, and M.-H. (2020). How Effective Are Drainage Systems in Mitigating Flood Losses? *Cities*. 107(102917), 1-9. [<https://doi.org/10.1016/j.cities.2020.102917>]. IF: 6.7
14. **Sohn, W.**, Kim, J.-H., Li, M.-H., Brown, R., and Jaber, F. (2020). How Does Increasing Impervious Surfaces Affect Urban Flooding in Response to Climate Variability? *Ecological Indicators*. 118(106774), 1-12. [<https://doi.org/10.1016/j.ecolind.2020.106774>]. IF: 6.9
15. **Sohn, W.**, Kim, H., Kim, J.-H., and Li, M.-H. (2020). The Capitalized Amenity of Green Infrastructure in Single-Family Housing Values: An Application of the Spatial Hedonic Pricing Method. *Urban Forestry and Urban Greening*. 49(126643), 1-10. [<https://doi.org/10.1016/j.ufug.2020.126643>]. IF: 6.4
16. Yang, S.** , Kim, J.-H., **Sohn, W.**, Kotval-Karamchandani, Z. (2020). Developing a Revitalization Planning and Design Guideline for Enhancing Land Use Performance of a Shrinking City. *Journal of People, Plants, and Environment*. 23(4), 387-398. [<https://doi.org/10.11628/kspe.2020.23.4.387>].
17. **Sohn, W.**, Kim, J.-H., Li, M.-H., and Brown, R. (2019). The Influence of Climate on the Effectiveness of Low Impact Development: A Systematic Review. *Journal of Environmental Management*. 236, 365-379. [<https://doi.org/10.1016/j.jenvman.2018.11.041>]. IF: 8.7
18. **Sohn, W.**, Kim, J.-H., and Li, M.-H. (2017). Low Impact Development for Impervious Surface Connectivity Mitigation: Assessment of Directly Connected Impervious Area (DCIA). *Journal of Environmental Planning and Management*. 60(10), 1-19. [<https://doi.org/10.1080/09640568.2016.1264929>]. IF: 3.6
19. Kim, J.-H., Gu, D., **Sohn, W.**, Kil, S.-H., Kim, H., and Lee, D.-K. (2016). Neighborhood Landscape Spatial Patterns and Land Surface Temperature: An Empirical Study on Single-Family Residential Areas in Austin, Texas. *International Journal of Environmental Research and Public Health*. 13, 880. [<https://doi.org/10.3390/ijerph13090880>]. IF: 5.4
20. Kim, J.-H., Lee, C., and **Sohn, W.** (2016). Urban Natural Environments, Obesity, and Health-related Quality of Life among Hispanic Children Living in Inner-city Neighborhoods. *International Journal of Environmental Research and Public Health*. 13(1), 121. [<https://doi.org/10.3390/ijerph13010121>]. IF: 5.4
21. Kim, J.-H., Ning, S., **Sohn, W.**, Newman, G., and Thomas, M. (2015). The Energy Corridor District Comprehensive Master Plan, Houston, Texas, USA. *Landscape Architecture Frontiers*. 3(5), 82-97. [<https://journal.hep.com.cn/laf/EN/Y2015/V3/I5/82>].
22. Newman, G., **Sohn, W.**, and Li, M.-H. (2014). Performance Evaluation of Low Impact Development: Groundwater Infiltration in a Drought Prone Landscape. *Landscape Architecture Frontiers*. 2(4), 122-133. [<https://journal.hep.com.cn/laf/EN/>].

Manuscripts Under Review & In Preparation

1. Shahmohammad, M.* , Salamattalab, M.** , **Sohn, W.**, Kouhizadeh, M., and Aghamohmmadi, N. (Under Review). Unveiling the Opportunities and Obstacles of Blockchain in Pursuit of Sustainable Development Goal 11: A Review. *Sustainable Cities and Society*.
2. Lee, R.J., Xu, Z.* , Newman, G., Lee, C., Song, Y., **Sohn, W.**, Li, D., and Ding, Y.** (Under Review). Green

Infrastructure and Campus Health: Exploring the Characteristics of Community Health and Campus Users in Three University Towns in Texas. *Health and Place*'.

3. Krise, D.*, **Sohn, W.**, and Kim, J.-H. (Under Review). Prioritizing Green Infrastructure: Pre-design Optimization through Sensitivity Analysis. *Water Resources Management*.
4. Bae, C., Lee, D., and **Sohn, W.** (Under Review). Quantifying the Effects of Green-Gray Infrastructure at the Urban Catchment Scale Under Various Rainfall Patterns. *Journal of Hydrologic Engineering*.
5. **Sohn, W.**, Xu, Z.*, Lu, G.**, Kim, J.-H. (In preparation). Climate Resilience and Vulnerability Indexes for Shrinking Cities.
6. **Sohn, W.**, Ruemenapp, M., and Kotval-K, Z. (In preparation). Compound Hazard Management: Challenges Arising from Conflicting Planning Priorities in the COVID-19 Era.
7. **Sohn, W.**, Kim, J.-H., Li, M.-H. (In preparation). The Effect of Land Use Configuration on Surface Runoff under Varying Climate Conditions.
8. Kim, J.-H., Li, W., and **Sohn, W.** (In preparation). Neighborhood Landscape Spatial Patterns and Housing Market Values in Urban and Suburban Regions.
9. Kabiry, M.**, Shahmohammad, M.*, and **Sohn, W.** (In preparation). Assessing Energy-Efficient Roofing Solutions for Different U.S. Climate Zones: A Simulation-Based Study.

Book Chapter

Sohn, W. (2023). Chapter 11. Green Infrastructure for Climate Change and Risk Adaptation. In: Climate Risk and Insurance. Seoul, South Korea: Bomundang (In Korean).

Peer-reviewed Conference Proceedings

1. **Sohn, W.**, Kim, J.-H., and Li, M.-H. (2015). Low Impact Development Applications in Urban Watersheds: Efficacy Evaluation by Imperviousness Connectivity Estimations. *True Smart and Green City?* Proceedings of the 8th International Conference of the International Forum on Urbanism (IFoU).
2. **Sohn, W.**, Kim, J.-H., and Newman, G. (2014). A BLUEprint for Stormwater Infrastructure Design: Implementation and Efficacy of LID. *Landscape Research Record*. 2, 50-61.

Peer-reviewed Published Abstracts

1. **Sohn, W.**, Cheng, W., Kim, J.-H., and LaGro, J. (2024). Panel: Reshaping Our Future: Leveraging Federal Grants and Academic Publications for Climate Adaptation and Landscape Innovation. Council of Educators in Landscape Architecture (CELA), March 20-23, St. Louis, MO.
2. Lee, C., Newman, G., Lee, S., Deng, L., Ding, Y., Park, A., and **Sohn, W.** (2024). Panel on Landscape Architecture for Health: Student Health and Campus Environment in Higher Education. Council of Educators in Landscape Architecture (CELA), March 20-23, St. Louis, MO.
3. **Sohn, W.**, Krise, D.*, Kim, J.-H., and Kline-Robach, R. (2024). Green Infrastructure Optimization: Advancing Pre-design Efficiency through Sensitivity Analysis. Council of Educators in Landscape Architecture (CELA), March 20-23, St. Louis, MO.
4. Kim, J.-H., **Sohn, W.**, and Rye, R.* (2024). Revitalizing Flint Through Landscape Performance: A Collaborative Restoration Project. Council of Educators in Landscape Architecture (CELA), March 20-23, St. Louis, MO.
5. Xu, Z.*, Lu, G.**, **Sohn, W.**, and Kim, J.-H. (2024). A Multidimensional Framework Incorporating Climate Vulnerability and Resilience Indexes in Shrinking Cities: A Case Study in Midwestern Communities. Council of Educators in Landscape Architecture (CELA), March 20-23, St. Louis, MO.
6. Kim, J.-H., Bodea, A.**, **Sohn, W.**, and Durst, N. (2024). Restoring a Brownfield with Ecological Design Principles: A Case Study in River Rouge, MI. Council of Educators in Landscape Architecture (CELA), March 20-23, St. Louis, MO.

MO.

7. **Sohn, W.**, Kotval-Karamchandani, Z., Ruemenapp, and M., Schertzing, P. (2023). Navigating Compound Risks in an Urban Area: Unraveling Challenges in Concurrent Climate Extremes and the COVID-19 Pandemic Using Mixed Methods. American Geophysical Union (AGU), December 11-15, San Francisco, CA.
8. Xu, Z.* , **Sohn, W.**, and Lan, X.** (2023). Assessing Flood Risk and Watershed Topologies in the Continental United States: A Machine Learning Approach Integrating Flood Intensity, Duration and Frequency. American Geophysical Union (AGU), December 11-15, San Francisco, CA.
9. Li, D.** , Lee, C., Lee, S., Newman, G., Li, D., Song, Y., Lee, R.J., and **Sohn, W.** (2023). Physical Activity and Psychological Wellbeing of U.S. College Students: Impacts of COVID-19 and Institutional Characteristics. Association of Collegiate Schools of Planning (ACSP), October 19-21, Chicago, IL.
10. Madill, H., Dust, N., Martinez, D., Nubani, L., and **Sohn, W.** (2023). Panel: Community Collaborations: Changing Our Built World, Changing Our Research! Engagement Scholarship Consortium (ESC), October 4-5, East Lansing, MI.
11. Lee, C., Newman, G., Li, D., Song, Y., Lee, R.J., **Sohn, W.**, Lee, S., Ding, Y.** (2023). Panel: Landscape Architecture for Health: Student Health and Campus Environment in Higher Education. Council of Educators in Landscape Architecture (CELA), March 15-18, San Antonio, TX.
12. **Sohn, W.**, and Kotval-Karamchandani, Z. (2023). Survey on Flood Evacuation and Sheltering Choices during the COVID-19 Pandemic. Council of Educators in Landscape Architecture (CELA), March 15-18, San Antonio, TX.
13. Kreiner, M.* , **Sohn, W.**, Kim, J.-H., and Tongbin, T. (2023). Community Green Network Development by Restoring Natural Habitats: Applying Pollinator Garden Design. Council of Educators in Landscape Architecture (CELA), March 15-18, San Antonio, TX.
14. Xu, Z.* , Karimi, S.** , **Sohn, W.**, and Kim, J.-H. (2023). A Systematic Assessment Framework of Assessing Climate Vulnerability and Resilience for Shrinking Cities. Council of Educators in Landscape Architecture (CELA), March 15-18, San Antonio, TX.
15. Kim, J.-H., Shevela, B.** , **Sohn, W.**, and Durst, N. (2023). Landscape Performance Research for Assessing Design Impact. Council of Educators in Landscape Architecture (CELA), March 15-18, San Antonio, TX.
16. Lee, R.J., Xu, Z.* , Newman, G., Song, Y., Lee, C., **Sohn, W.**, Li, D., and Ding, Y.** (2023). Green Infrastructure and Campus Health: Exploring the characteristics of community health and campus users in three university towns in Texas. Center for Health and Nature Symposium. February 3, College Station, TX.
17. Ding, Y.** , Lee, C., Deng, L.** , Chen, C.** , Song, Y., Newman, G., Lee, R., Lee, S., **Sohn, W.**, and Li, D. (2023). Campus Environment of Higher Education on Students' Health: A systematic review. Center for Health and Nature Symposium, February 3, College Station, TX.
18. Xu, Z.* , and **Sohn, W.** (2022). Are Limiting Total Impervious Areas (TIA) and Improving Green Infrastructure Connectivity Effective for Flooding Control in Both Growing and Shrinking Cities? American Geophysical Union (AGU), December 12-16, Chicago, IL.
19. Park, S.** , **Sohn, W.**, Piao, Y.** , and Lee, D. (2022) Performance Evaluation of Adaptation Strategies for Coastal Flood Risk Management under Climate Change. Korea Insurance Joint Conference, August 19, Seoul, South Korea.
20. Lee, R., Newman, G., Lee, C., Song, Y., Xu, Z.* , **Sohn, W.**, Ding, Y.** , and Li, D. (2022) Green Infrastructure and Campus Health: Examining the Characteristics of College Campus Users. Environmental Design Research Association (EDRA), June 1-4, Greenville, SC.
21. **Sohn, W.**, Bae, J.** , and Newman, G. (2022). The Role of Green Infrastructure Configuration for Adapting to Coastal Flood Risk. Council of Educators in Landscape Architecture (CELA), March 16-19, Santa Ana Pueblo, NM.
22. Xu, Z.* , and **Sohn, W.** (2022). Land use drivers for flooding in Midwest: Longitudinal assessment of land use composition and configuration in growing and depopulating regions. Council of Educators in Landscape Architecture (CELA), March 16-19, Santa Ana Pueblo, NM.

23. Kim, J.-H., O'Keefe, P.*, **Sohn, W.**, and Kotval-Karamchandani, Z. (2022). Landscape Performance Research to Enhance Resilience of a Vulnerable Community in Michigan. Council of Educators in Landscape Architecture (CELA), March 16-19, Santa Ana Pueblo, NM.
24. Bae, J.***, Newman, G., and **Sohn, W.** (2021). A Longitudinal Assessment of Urban Green Infrastructure Conditions across Coastal Texan Cities. Association of Collegiate Schools of Planning (ACSP), Oct. 7-8 and 21-23, (virtual conference).
25. **Sohn, W.**, Brody, S., Kim, J.-H., and Li, M.-H. (2021). How Effective Are Drainage Systems in Mitigating Flood Losses? Council of Educators in Landscape Architecture (CELA), March 17-19 (virtual conference).
26. Park, J., Kim, J.-H., **Sohn, W.**, and Lee, D. (2021). Do Small Green Spaces Cool Down Urban Air Temperature More Than Building-Shaded Spaces in Summer? Council of Educators in Landscape Architecture (CELA), March 17-19 (virtual conference).
27. Kim, J.-H., Yang, S.***, **Sohn, W.**, and Kotval-Karamchandani, Z. (2021). Developing a Revitalization Planning and Design Guideline for Enhancing Land Use Performance of a Shrinking City. Council of Educators in Landscape Architecture (CELA), March 17-19 (virtual conference).
28. **Sohn, W.**, Kim, J.-H., and Li, M.-H. (2020). Hydraulic Connectivity of Impervious Surfaces as a Key Indicator of Urban Flood Control. American Geophysical Union (AGU), Dec. 1-17, (virtual conference).
29. **Sohn, W.**, Kim, J.-H., Li, M.-H., Brown, R., and Jaber, F. (2020). The Effect of Imperviousness on Surface Runoff under Varying Climate Conditions. Council of Educators in Landscape Architecture (CELA), March 18-21, Louisville, KY (conference cancelled due to COVID-19 pandemic).
30. **Sohn, W.**, Kim, H.-W., Kim, J.-H., and Li, M.-H. (2019). Assessing the Capitalization Effects of Retention and Detention Ponds on Single-Family Housing Values. Council of Educators in Landscape Architecture (CELA), March 6-9, Sacramento, CA.
31. **Sohn, W.**, Kim, J.-H., and Li, M.-H. (2018). The Impact of Climatic Factors on the Efficiency of Low Impact Development: A Systematical Review of Empirical and Methodological Research. Council of Educators in Landscape Architecture (CELA), March 21-24, Blacksburg, VA.
32. Tao, Z., **Sohn, W.**, Wang, R., Cao, L., Newman, G., Li, M.-H., Arnold, M.A., and Kim, J.-H. (2018). Aggie B.L.U.E.print Laboratories: A Multi-Disciplinary Teaching and Service Learning Opportunity. Council of Educators in Landscape Architecture (CELA), March 21-24, Blacksburg, VA.
33. **Sohn, W.**, Kim, J.-H., and Li, M.-H. (2017). What Factors Determine the Effectiveness of Low Impact Development Practices?: A Review of Current Literature. Council of Educators in Landscape Architecture (CELA), May 26-29, Beijing, China.
34. **Sohn, W.**, Kim, J.-H., Ning, S., and Kim, Y. (2017). A System-oriented Design Approach for Urban Revitalization: Transit Hub and Mixed-Use Development in the Energy Corridor District, Houston, Texas, USA. Council of Educators in Landscape Architecture (CELA), May 26-29, Beijing, China.
35. Kim, J.-H., Gu, D., **Sohn, W.**, Kil, S.-H., Kim, H., and Lee, D.-K. (2017). Neighborhood Landscape Spatial Patterns and Land Surface Temperature: An Empirical Study on Single-Family Residential Areas in Austin, Texas. Council of Educators in Landscape Architecture (CELA), May 26-29, Beijing, China.
36. Kim, J.-H., Lee, C., and **Sohn, W.** (2016). Urban Natural Environments, Obesity, and Health-related Quality of Life among Hispanic Children Living in Inner-city Neighborhoods. Council of Educators in Landscape Architecture (CELA), March 23-26, Logan, UT.
37. **Sohn, W.**, Kim, J.-H., and Newman, G. (2016). Design Assessment for Sustainable Hydrologic System Development using a Systematic Framework. Council of Educators in Landscape Architecture (CELA), March 23-26, Logan, UT.
38. **Sohn, W.**, Kim, J.-H., and Li, M.-H. (2015). Low Impact Development Applications in Urban Watersheds: Efficacy Evaluation by Imperviousness Connectivity Estimations. International Forum on Urbanism (IFoU), June 22-24, Incheon, South Korea.
39. **Sohn, W.**, Guo, R., and Kim, J.-H. (2015). Multi-functional Infiltration: WaterSmart Management for Campus

Landscape. Environmental Design Research Association (EDRA), May 27-30, Los Angeles, CA.

40. **Sohn, W.**, Kim, J.-H., and Newman, G. (2015). Groundwater Infiltration as a WaterSmart Use Strategy: Performance Evaluation of Low Impact Development in Conroe, Texas. Council of Educators in Landscape Architecture (CELA), March 24-28, Manhattan, KS.
41. **Sohn, W.**, Kim, J.-H., and Li, M.-H. (2015). Low Impact Development for Impervious Surface Connectivity Mitigation: Assessment of Directly Connected Impervious Area (DCIA) in the Energy Corridor District, Houston, TX. Council of Educators in Landscape Architecture (CELA), March 24-28, Manhattan, KS.
42. **Sohn, W.**, Kim, J.-H., and Newman, G. (2015). An Efficacy Assessment Model for Integrated LID Designs: Application to Three LID Based Projects in Texas. International LID Conference of the American Society of Civil Engineers (ASCE), January 19-21, Houston, TX.
43. **Sohn, W.**, Kim, J.-H., and Newman, G. (2014). A BLUEprint for Stormwater Infrastructure Design: Implementation and Efficacy of LID. Council of Educators in Landscape Architecture (CELA), March 26-30, Baltimore, MD.
44. **Sohn, W.**, Kim, J.-H., Bardenhagen, E., Newman, G., Zhang, Y., Wang, Y., Li, Z., and Baumgarten, M. (2014). Systems-Oriented Design Approach for Creating a Walkable and Sustainable Community. Council of Educators in Landscape Architecture (CELA), March 26-30, Baltimore, MD.

Other Publications and Technical Reports

1. **Sohn, W.**, Kotval-Karamchandani, Z., Ruemenapp, M., Schertzing, P., Xu, Z.* , Krise, D.* , and Bortmas, Q.* (2022). Climate Extremes and the COVID-19 Pandemic: Advancing the Resilience of Michigan Communities to Compound Hazards. Institute for Public Policy and Social Research, Michigan State University.
2. **Sohn, W.**, and Xu, Z.* (2022). Longitudinal Assessment of Development Composition and Spatial Patterns of Green Infrastructure for Effective Flood Control in Growing and Shrinking US Metropolitan Area. Council of Educators in Landscape Architecture (CELA), Raleigh, NC.
3. Kim, J.-H., Ning, S., **Sohn, W.**, Thomas, M., Demarie, F., Bian, J., Feng, H., and Liu, J. (2015). A Great Place to Live, Work, And Entertain: The Energy Corridor District Comprehensive Master Plan. The Energy Corridor District, Houston, TX.

GRANTS

Extramural Research Grants

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| 2023-2028 | PI/Co-PI , “Building Resilience Against Climate Effects” funded by the Michigan Department of Health and Human Services (Prime Sponsor: US Environmental Protection Agency). PIs/Co-PIs: Kim, J.-H., Sohn, W., Beyea, W. and Neumann, B. <u>\$575,000</u> .

Rotating PIs annually (Sohn to serve as PI for Years 3-5). Yearly Contracts Awarded to Date: <ul style="list-style-type: none">▪ 2023-2024: Co-PI. <u>\$140,000</u>.▪ 2023: Co-PI. <u>\$57,600</u>. |
| 2023-2026 | PI , “Restoring Wetland and Terrestrial Habitat to Improve Green Spaces and Water Quality in Pierce Park (MI)” funded by the National Fish and Wildlife Foundation. Co-PIs: Kim, J.-H., Keeler, M., DeLisle, J., & Ford, R. Total grant amount (including \$324K matching): <u>\$1,139,736</u> . |
| 2023-2024 | Co-PI , “Sustainable Park Design and Planning Project” funded by the Michigan Department of Natural Resources. PI: Kim, J.-H. and Co-PIs: Saeidi-Rizi, F. <u>\$30,000</u> . |
| 2022-2023 | Co-PI , “Sustainable Park Design and Planning Project” funded by the Michigan Department of Natural Resources. PI: Kim, J.-H. <u>\$30,000</u> . |
| 2021-2024 | PI , “Development of Comprehensive Climate Vulnerability and Resilience Capacity Indexes for Enhancing Urban Recovery in Midwestern Communities” funded by the US Department of Housing and Urban Development. Co-PI: Kim., J.-H. Total grant amount (including \$163,073 |

matching): \$326,146.

- 2021-2022 **PI**, “Longitudinal Assessment of Development Composition and Spatial Patterns of Green Infrastructure for Effective Flood Control in Growing and Shrinking US Metropolitan Areas” funded by the Council of Educators in Landscape Architecture, CLASS Fund. \$25,000.
- Co-PI**, “Sustainable Park Design Vision Plan” funded by the Michigan Department of Natural Resources. PI: Kim, J.-H. \$30,000.
- 2020 **Co-PI**, “A Case Study of Community Resilience Planning and Design Guideline for Vulnerable Urban Areas” funded by the Architecture and Urban Research Institute, South Korea. PI: Kim, J.-H., Co-PIs: Lee, E., & Park, J. \$25,000.
- 2018 **PI**, “The Impact of Climate Conditions on the Urbanization-Runoff Process and Implications for Low Impact Development” funded by the Texas Water Resources Institute. \$5,000.

Intramural Grants

Research

- 2021-2022 **PI**, “Climate Extremes and the COVID-19 Pandemic: Advancing the Resilience of Michigan Communities to Compound Hazards” funded by the Institute for Public Policy and Social Research, Michigan State University. Co-PIs: Kotval-Karamchandani, Z., Ruemenapp, M., and Schertzing, P. \$30,000.

Instruction

- 2021-2022 **Co-PI**, “SPDC Classroom Upgrades for Hybrid Instructions,” Teaching and Learning Environment (TLE) Grant, Michigan State University. PIs: Zhao, D. and Balluff, W., and Co-PIs: Kotval-Karamchandani, Z., and Nubani, L. \$58,000.

OTHER PRESENTATIONS

Invited Presentations

- 2022 ***Tropical Cyclone Risk and Loss Prediction under Climate Change (Panelist)***
Korean Risk Management Society, Seoul, South Korea
- Natural Disasters and Climate Change (Panelist)***
Korean Risk Management Society, Seoul, South Korea
- 2021 ***The Role of Green Infrastructure for Climate Change Protection***
University of Seoul, Seoul, South Korea
- Climate Impacts on the Effectiveness of Green Infrastructure***
Seoul National University, Seoul, South Korea
- Green Infrastructure for Flood Mitigation***
The Korean Institute of Landscape Architecture, Seoul, South Korea

Media Coverage

- 2024 The project funded by the National Fish and Wildlife Foundation featured in ABC 12, WNEM, and Flint Beat News
https://www.abc12.com/news/local/national-fish-and-wildlife-foundation-provides-over-815k-to-transform-flint-golf-course/article_f1469eb4-cf7d-11ee-ba44-13b45c9f3c36.html
<https://www.wnem.com/2024/02/19/more-than-840k-awarded-transform-former-flint-golf-course/>

<https://flintbeat.com/flint-park-site-receives-nearly-900k-in-funding-for-ecological-restorations/?fbclid=IwAR2wFgxiDyJ643B1VSoouTDTkCmfkLz2x4nYtK91t5Wgv3fmX2g22gT7qw>

- 2021 Interview published in *Conservation Matters* by the Texas Water Resources Institute
<https://twri.tamu.edu/news/2021/february/soaking-up-rising-floodwaters-in-growing-cities/>
- 2013 TX ASLA award-winning design introduced in *The Architecture Newspaper*
<https://archpaper.com/2013/07/water-aggies/>

Guest Lectures

- 2020-2021 **Systematic Literature Review for Scientific Research**
CMP 893 Research Methods in Built Environment, Michigan State University, East Lansing, MI
- 2017 **Graphical Communication for Urban Design**
URPN 483 Studio in Urban & Regional Science, Texas A&M University, College Station, TX
- Quantitative Design Assessment of Low Impact Development Projects**
LAND 312 Landscape Design IV, Texas A&M University, College Station, TX
- Site Analysis and Inventory for Urban Design**
URPN 483 Studio in Urban & Regional Science, Texas A&M University, College Station, TX
- 2015 **Introduction to Landscape Design**
LAND 101 Introduction to Landscape Architecture Practices, Texas A&M University, College Station, TX
- 2014 **Methods to Measure Benefits of Low Impact Development Projects**
LAND 312 Landscape Design IV, Texas A&M University, College Station, TX
- Practices in Landscape Architecture**
Youth Adventure Program: Summer Design Camp for High School Students, Texas A&M University, College Station, TX

TEACHING EXPERIENCE

COURSES TAUGHT

Michigan State University (Assistant Professor, 2019-Present)

- **LA 230 Site Construction Materials and Methods: Introductory Site Engineering**
(4 credits, 2nd year undergraduate students)
Introductory landscape construction course focusing on basic landform drainage principles, construction sequencing, structural composition, and the principal uses of landscape materials.
- **LA 231 Landscape Site Engineering: Intermediate Site Engineering**
(4 credits, 2nd year undergraduate students)
Intermediate landscape construction course focusing on earth-bound elements and sustainable water management techniques in landscape development: landform, cut and fill computations, road alignment, basic hydraulics and hydrology, stormwater management, applications of low impact development.
- **LA 447 Juried Design Studio** (5 credits, 4th year undergraduate students)
Advanced landscape design studio stressing the process of defining, developing, and carrying out an extensive and detailed project based on a real site, program needs, and input from multiple stakeholders.
- **LA/HRT 883 Environmental Design Seminar** (3 credits, graduate students)
Graduate seminar focusing on theoretical concepts and assessment methodologies of environmental planning, design, and management from ecological, social, and economic perspectives.

Texas A&M University (Instructor, 2016-2019)

- LAND 231 Landscape Construction I: Introductory Site Engineering (4 credits, 2nd year undergraduate students)
Landscape construction and site engineering course focusing on aspects of site engineering and consideration of earth-bound elements in land development; contours, landform, grading design, drainage principles, cut and fill computations, basic hydraulics and hydrology, stormwater management.
- LAND 331 Landscape Construction III: Advanced Site Engineering (4 credits, 3rd year undergraduate students)
Advanced landscape construction course focusing on sustainable water management techniques in landscape development; theory, principles, and techniques of low impact development; construction document preparation, working drawings, project layout and design; theory and principles of irrigation design.
- URPN 483 Design Studio in Urban & Regional Science: Introductory Urban Design Studio for Sustainable Development (1-6 credits, 3rd and 4th year undergraduate students)
Urban design studio introducing concepts of urban form and the confluence of ecological, environmental, economic, social, and cultural forces impacting the planning, design, and development of complex urban environments; comprehensive site analysis, land planning, and design practices.
- URPN 220 Digital Communication I: Integrating Technology into Site Design (3 credits, 1st and 2nd year undergraduate students)
Digital graphic communication course introducing concepts and principles of graphic composition; applications of computer graphics and rendering in landscape architecture and urban design using diverse visualization software (e.g., AutoCAD, Photoshop, SketchUp, and InDesign).

Texas A&M University (Teaching Assistant, 2015)

- LAND 311 Landscape Design III: Advanced Landscape Design Studio for Urban Resiliency (Instructors: Drs. Newman and Hurst; 5 credits, 3rd year undergraduate students)
Advanced landscape design studio focusing on the design process, sustainable landscape design, synthesis, and design refinement.

DESIGN PROJECTS & ACTIVITIES

Service-Learning Projects

2023 Fall	Sustainable Park Design and Planning Project for Belle Isle in Detroit, MI in LA 447 Juried Design Studio (supported by the Michigan Department of Natural Resources).
2022 Fall	Sustainable Park Design and Planning Project for Belle Isle in Detroit, MI in LA 447 Juried Design Studio (supported by the Michigan Department of Natural Resources). Wetland Restoration Project for Pierce Park in Flint, MI in LA 447 Juried Design Studio (in partnership with the Pierce Park Nature Preserve).
2021 Fall	Sustainable Park Design Vision Plan for Belle Isle in Detroit, MI in LA 447 Juried Design Studio (supported by the Michigan Department of Natural Resources).

GRADUATE COMMITTEES

Student Name	Faculty Role	Degree Sought	Topic/Title	(Expected) Year of Graduation	
<i>Chair/Co-Chair</i>					
1	Mohsen Shahmohammadi	Chair	PhD	Green roof agrivoltaic for energy saving and food production	(2028)

2	Zhicheng Xu	Chair	PhD	Urban stormwater management and green infrastructure	(2025)
3	Quenton Bortmas	Chair	MED	Contemporary trends and issues in landscape architecture practices: A case study of a national survey	2024
4	Rachael Rye	Chair	MED	Green stormwater infrastructure for water quality improvement	2024
5	Dustin Krise	Chair	MED	Scenario-based green infrastructure design for enhancing community resilience to climate change	2023
6	Mitch Kreiner	Co-chair	MED	Community green network development by restoring natural habitats: Applying pollinator garden design	2022
7	Paige O'Keefe	Co-chair	MED	Landscape performance research to enhance resilience of a vulnerable community in Michigan	2021

Committee Member

8	Jordan White	Member	MED	Landscape performance of three redevelopment sites in southeast Michigan	2024
9	Andreea Bodea	Member	MED	Ecological restoration of brownfields	2023
10	Chaeyoung Bae*	Member	PhD	Flood mitigation effect of green-gray infrastructure in an urban area	2022
11	Bridget Guminik	Member	MED	Sustainable public place development with community participant process: A case study of Belle Isle State Park, MI	2022
12	Brooke Shevela	Member	MED	designing decline: The reclamation of an industrial site and the design impacts on environmental, social, and economic resilience	2022
13	Elijah Lentz	Member	MED	Street skateboarding mitigation through strategic landscape plantings	2022
14	Ted Cook	Member	MED	Do neighborhood parks in a declined city improve housing property value?	2022
15	Amanda Wakefield	Member	MED	Implementing green infrastructure for restoring the Red Cedar River	2020
16	Shu Yang	Member	MED	Developing a revitalization planning and design guideline for enhancing land use performance of a shrinking city	2020

*Note: Served as an external committee member for a student at Seoul National University, Seoul, South Korea.

STUDENT AWARDS Served as a Faculty Advisor

- 2023 **Honor Award in the General Design Category**, American Society of Landscape Architects Michigan Chapter (Mi-ASLA), "Revive the Isle," Students: Matthew Bayer and Jordan White, Faculty Advisor: **Wonmin Sohn**.
- 2022 **Honorable Mention (3rd Place) in the Master Plan Category**, Environmental Protection Agency (EPA)'s 10th annual Campus RainWorks Challenge for the Student Research & Design Project "[Re] - Forms: A Master Plan for Michigan State University," Students: Kyle Trautmann, Avery Smothermon, and Joseph Jennings, Faculty Advisors: Jun-Hyun Kim and **Wonmin Sohn**.
- 2020 **Honorable Mention (3rd Place) in the Master Plan Category**, Environmental Protection Agency (EPA)'s 8th annual Campus RainWorks Challenge for the Student Research & Design Project "Blue

Lines: Rethinking Water Sustainability on Campus,” Students: Amanda Wakefield, Mitchell Kreiner, Angela Yuan, and Sam Linebaugh, Faculty Advisors: Jun-Hyun Kim, **Wonmin Sohn**, Ruth Kline-Robach, and Ming-Han Li.

SERVICE ACTIVITIES

COMMITTEES & AFFILIATIONS

International and National Committees

2023-present Co-Chair, Urban Design Track, Council of Educators in Landscape Architecture (CELA)
2023-present Michigan State Board Member At Large, Sigma Lambda Alpha

University Affiliations

2020-Present Affiliated Faculty, Environmental Science & Policy Program (ESPP), Michigan State University
Affiliated Faculty, Institute of Water Research (IWR), Michigan State University
Member, Diversity Research Network (DRN), Michigan State University
2019-Present Faculty Fellow, Microclimatic Design Research Group (MDRG), Texas A&M University

School Committees at Michigan State University

2024-Present Member, SPDC Director Search and Screening Committee
Member, SPDC (Re)Structure Review Committee
2022-Present Member, School Advisory Committee
2019-Present Member, Technology Ad Hoc Committee

Program Committees at Michigan State University

2023-2024 Member, LA Program Faculty Search Committee (Teaching Specialist)
2022-2023 Member, LA Program Faculty Search Committee (Tenure Stream Assistant Prof.)
2021-Present Advisor, LAF Olmsted Scholar Nomination
2019-Present Member, PDC PhD Program Application Review Committee
Member, MED Program Application Review Committee

SCHOLARLY REVIEW

Editorial Roles

2023-Present Co-Editor, Landscape Research Record*, Vol. 12.
**A peer-reviewed publication from the Council of Educators in Landscape Architecture (CELA)*

Grant Proposals Review

2021 Review panel member, National Science Foundation (NSF)
2019 Proposal reviewer, Annual Small Grants Program by Illinois Water Resources Center

Journal Manuscripts/Conference Abstracts Review

2023 Manuscript reviewer, Building and Environment
Manuscript reviewer, Landscape Research Record – Climate Action Track
Abstract reviewer, Council of Educators in Landscape Architecture 2024 Conference – Climate Action Track
2021 Manuscript reviewer, Landscape and Urban Planning
2020-2022 Manuscript reviewer, Water

2020 Manuscript reviewer, Landscape and Ecological Engineering
2020 Manuscript reviewer, Journal of Hydrology
2019 Abstract reviewer, Council of Educators in Landscape Architecture 2020 Conference – Urban Design Track

SOCIETY MEMBERSHIP

2020-present Member, American Geophysical Union (AGU)
2019-Present Member, Council of Educators in Landscape Architecture (CELA)
Member, American Society of Landscape Architects (ASLA)
Member, Michigan Chapter of the American Society of Landscape Architects (MiASLA)