

YEKANG KO, Ph.D.

Associate Professor | Faculty Director for Asian Engagement | School of Environment and Sustainability (SEAS) |
University of Michigan
Co-Director | Sustainable Cities and Landscapes Program | Association of Pacific Rim Universities (APRU)
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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

Ph.D. Landscape Architecture and Environmental Planning, 2012

GRADUATE INSTITUTE OF PEACE STUDIES, KYUNG HEE UNIVERSITY, Namyangju, South Korea

M. Area Studies (Asia-Pacific Studies), 2007

KOREA UNIVERSITY, Seoul, South Korea

B.S. Environmental Science and Ecological Engineering, 2005

ACADEMIC APPOINTMENTS

- 2025—Present *Associate Professor of Landscape Architecture*
School for Environment and Sustainability, UNIVERSITY OF MICHIGAN
- 2022— 2025 *Senior Scientist (Joint Appointment, Invited)*
Electricity Infrastructure and Buildings Division, PACIFIC NORTHWEST NATIONAL LABORATORY
- 2020—2025 *Associate Professor of Landscape Architecture, affiliated in Public Policy, Planning, and Management*
2016—2020 *Assistant Professor of Landscape Architecture*
Department of Landscape Architecture, UNIVERSITY OF OREGON
- 2012—2016 *Assistant Professor of Environmental Planning*
Department of Planning and Landscape Architecture, UNIVERSITY OF TEXAS, ARLINGTON
- 2011 *Lecturer*
Department of Landscape Architecture and Environmental Planning, UC BERKELEY

LEADERSHIP/ADMINISTRATIVE APPOINTMENTS

- 2025—Present *Co-Director of Sustainable Cities and Landscapes (SCL) Program*
2017— 2025 *Director of SCL Program*
ASSOCIATION OF PACIFIC RIM UNIVERSITIES (APRU)
- 2023—2024 *Director of Graduate Studies (MLA and PhD)*
2017—2022 *Director of Undergraduate Studies (BLA)*
Department of Landscape Architecture, UNIVERSITY OF OREGON
- 2017—2019 *Working Group Leader*
Urban Renewable Energy Working Group, APRU SCL

RESEARCH & TEACHING INTERESTS

Renewable energy landscapes, green infrastructure planning, climate change planning and design, climate justice, environmental education, community service learning, Asia-Pacific region

PUBLICATIONS (*denotes graduate students)**Peer-reviewed Articles**

- Elderbrock, E.* , Russel, K., Ko, Y., Budd, E., Gonen, L., Enright, C. 2024. Evaluating Urban Green Space Inequity to Promote Distributional Justice in Portland, Oregon. *Land*. 13(6):720. <https://doi.org/10.3390/land13060720> (Selected as the editor's pick for the cover of the journal issue)
- Kim, S.* , Ko, Y., and Jang, K. 2024. Air pollution, perceived health risk, and trip decision-making: Environmental justice considerations" *Cities*. <https://doi.org/10.1016/j.cities.2024.104949>
- Kim, S.* , Ko, Y., and Jang, K.2023. Role of Income on Travel Behavior in Polluted Air. *Journal of Transport & Health*. 33:101705. <https://doi.org/10.1016/j.jth.2023.101705>
- Elderbrock, E.* , Ponette-González, A., Rindy, J., Lee, J.-H., Weathers, K., Ko, Y. 2023. Modeling Black Carbon Removal by City Trees: Implications for Urban Forest Planning, *Urban Forestry and Urban Greening* 86: 128013. <https://doi.org/10.1016/j.ufug.2023.128013>
- Ponette-González, A.G., Chen, D* , Elderbrock, E.* , Rindy, J.E., Barrett, T.E., Luce, B.W., Lee, J.-H., Ko, Y., and Weathers, K.C. 2022. Urban edge trees: Urban form and meteorology drive elemental carbon deposition to canopies and soils. *Environmental Pollution*: 314. <https://doi.org/10.1016/j.envpol.2022.120197>.
- Wang, H-W., Dodd, A.* , and Ko, Y. 2022. Resolving the Conflict of Greens: A GIS-based and participatory least-conflicting siting framework for renewable energy development in Taiwan, *Renewable Energy* 197: 879-892. <https://doi.org/10.1016/j.renene.2022.07.094>
- Namin, S*., Ko, Y., Zhou, Y, and Beyer, K. 2022. Discourse analysis of the perceptions of environmental justice and respiratory health disparities in Dallas, TX, *Local Environment* 27:3, 272-286 <https://doi.org/10.1080/13549839.2022.2040460>
- Ko, Y., Barrett, B.F.D., Copping, A.E., Sharifi, A., Yarime, M., and Wang, X. 2019. Energy Transitions Towards Low Carbon Resilience: Evaluation of Disaster-Triggered Local and Regional Cases. *Sustainability* 11, 6801. <https://doi.org/10.3390/su11236801>
- A.W. Foss* and Ko, Y. 2019. Barriers and opportunities for climate change education: the case of Dallas-Fort Worth in Texas. *The Journal of Environmental Education*, 50:145-159 <https://doi.org/10.1080/00958964.2019.1604479>
- Cease, B., Kim, H., Kim, D., Ko, Y., and Cole, C. 2019. Barriers and incentives for sustainable urban development: An analysis of the adoption of LEED-ND projects. *Journal of Environmental Management* 244: 304-312. <https://doi.org/10.1016/j.jenvman.2019.04.020>
- Ko, Y. 2018. Trees and vegetation for residential energy conservation: A critical review for evidence-based urban greening in North America, *Urban Forestry and Urban Greening* 34: 318-335. <https://doi.org/10.1016/j.ufug.2018.07.021>
- Ko, Y., Jang, K., and Radke, J.D. 2017. Toward a solar city: Trade-offs between on-site solar energy potential and vehicle energy consumption in San Francisco, California, *International Journal of Sustainable Transportation* 11(6): 460-470. <https://doi.org/10.1080/15568318.2016.1274807>
- Ko, Y., Roman, L.A., McPherson, E.G., and Lee, J. 2016. Does tree planting pay us back? Lessons from Sacramento, CA. *Arborist News* June 2016: 50-54.
- Adil, A.* M. and Ko, Y. 2016. Socio-technical evolution of Decentralized Energy Systems: A critical review and implications for urban planning and policy, *Renewable and Sustainable Energy Reviews* 57: 1025–1037. <https://doi.org/10.1016/j.rser.2015.12.079>
- Lee, J., Ko, Y., and McPherson, E.G. 2016. The feasibility of remotely sensed data to estimate urban tree dimensions and biomass, *Urban Forestry and Urban Greening* 16: 208-220. <https://doi.org/10.1016/j.ufug.2016.02.010>
- Ko, Y., Lee, J., McPherson, E.G., and Roman, L.A. 2015. Long-term monitoring of Sacramento Shade program trees: Tree survival, growth and energy-saving performance, *Landscape and Urban Planning* 143:183–191. <https://doi.org/10.1016/j.landurbplan.2015.07.017>

- Ko, Y., Lee, J., McPherson, E.G., and Roman, L.A. 2015. Factors affecting long-term mortality for residential shade trees: Evidence from Sacramento, CA, *Urban Forestry and Urban Greening* 14: 500–507. <https://doi.org/10.1016/j.ufug.2015.05.002>
- Ko, Y. and Radke, J.D. 2014. The effect of urban forms on residential cooling energy use in Sacramento, California, *Environment and Planning B: Planning and Design* 41(4): 573 – 593. <https://doi.org/10.1068/b12038p>
- Ko, Y. 2014. The effect of urban trees on residential solar energy potential, *Journal of the Korean Institute of Landscape Architecture* 42(1): 41-49. <http://dx.doi.org/10.9715/KILA.2014.42.1.041>
- Ko, Y. 2013. Urban form and residential energy use: A review of design principles and research findings, *Journal of Planning Literature* 28(4): 327-351. *Featured in the American Planning Association Planning Magazine October 2013* <https://doi.org/10.1177/0885412213491499>
- Yoon, J. and Ko, Y. 2013. STS student learning model: An effective approach to identifying environmental problems and solutions, *The International Journal of Science in Society* 4(2): 133-147. <https://doi.org/10.18848/1836-6236/CGP/v04i02/51385>
- Ko, Y., Schubert, D.K., and Hester, R.T. 2011. A conflict of greens: Green development versus habitat preservation—the case of Incheon, South Korea, *Environment* 53(3): 3- 17. <https://doi.org/10.1080/00139157.2011.570640>

Book Chapters

- Johnson, B. and Ko, Y. 2022. The APRU Sustainable Cities and Landscape Hub: A Platform for Collaborative Knowledge Production and Action, in *The Routledge Handbook of Sustainable Cities and Landscapes*, eds. Yang, Y. and Taufen, A. Abingdon: Routledge. <https://doi.org/10.4324/9781003033530>
- Coffman, M. and Ko, Y. 2022. Renewable Energy Landscapes across the Pacific Rim, in *The Routledge Handbook of Sustainable Cities and Landscapes*, eds. Yang, Y. and Taufen, A. <https://doi.org/10.4324/9781003033530>
- Ko, Y., Coffman, M., Mulvaney, D., Copping, A., Wang, H., Barrett, B.F.D. 2022. Conflicts of Greens' in Renewable Energy Landscapes: Case Studies and a Planning Framework, in *The Routledge Handbook of Sustainable Cities and Landscapes*, eds. Yang, Y. and Taufen, A. Abingdon: Routledge <https://doi.org/10.4324/9781003033530>
- Fiorelli, T.*, Yu, Y.*, Ko, Y., Dimond, K., and Coffman, M. 2022. Colocation for Co-benefits: the SWOC Analysis of Brightfields and Agrivoltaics, in *The Routledge Handbook of Sustainable Cities and Landscapes*, eds. Yang, Y. and Taufen, A. Abingdon: Routledge <https://doi.org/10.4324/9781003033530>
- Grover, A.*, Sambo, C.*, Meier, B.* and Ko, Y. 2022. The Contributions of Smart City Initiatives to Resilience: The Case of San Francisco, California, United States. *Resilient Smart Cities: Theoretical and Empirical Insights*, Springer Cham, eds. Sharifi, A. and Salehi, P. https://doi.org/10.1007/978-3-030-95037-8_13

Work in Progress

- Ko, Y., Morrice, K., Henderson, C. and Suskind, J. Powerline Corridors as Multifunctional Landscapes: New Vision and Interdisciplinary Approaches to Shape Energy Futures. *Landscape and Urban Planning (Under Review)*
- Fry, M., Cole, A., Ko, Y. and Ponette-González, A. The Digitalization of Urban Forestry: Tools to Manage and Advocate for City Trees. *Digital Geography and Society (Under Review)*
- Ko, Y. and Russel, K. Landscape for Humanity: A New Design Education Framework for Environmental Justice. In *Activism in Design Education*. ed. Latane, C.A., and Yang, J. Routledge. Revised and resubmitted to the editors.
- Doyon, A., Loyola, M.I.*, Cheng, C. and Ko, Y. Energy Transition and Climate Action in Galapagos: Policy Evaluation and Guiding Principles. In *Human Galapagos: Boundaries, Territories and Places*. ed. Dunn, J. and Andrade, J.E.L. Springer. Revised and resubmitted to the editors.
- Elderbrock, E.*, Russel, K., Ko, Y., Budd, E., Gonen, L., Enright, C. Historic Ties and a Transdisciplinary Future? Centering Public Health and Social Justice in Urban Green Space Planning. To be submitted to *Journal of American Planning Association*.

Elderbrock, E.* , Russel, K., Ko, Y., Budd, E., Gonen, L., Enright, C. A New Frontier in Health Equity Planning: Modelling Complex Relationships between Physical Activity, Mental Well-being, and Urban Green Space. To be submitted to *Health and Place*.

Yu, Y.* , and Ko, Y. A comprehensive review of designing and planning urban Biosolar roofs. To be submitted to *Sustainable Cities and Society*

Yu, Y.* , Ko, Y., and Lee, J. H. Urban photovoltaic (PV) green roofs at scale: Assessing their benefits and trade-offs, To be submitted to *Landscape and Urban Planning*

Y, Ko. A landscape approach for place-based renewable energy deployment. To be submitted to *Nature Sustainability*

Grant Reports

Preziuso, D. Dimond, K., and Ko, Y. 2023. *Renewable Energy Landscapes: Southwest and Pacific Northwest Workshops* (PNNL-34218). Pacific Northwest National Laboratory, Richland, Washington. Prepared for the U.S. Department of Energy. June 2023.

Ko, Y., Garbe, J.T., Moncheur de Rieudotte, M.P., Loquist, S. Preziuso, D.C., Baldwin, D.A., Robertson, B. 2023. *Energy Justice Framework for Marine Energy: Considerations from PacWave* (PNNL- 34231). Pacific Northwest National Laboratory, Richland, Washington. Prepared for the U.S. Department of Energy. May 2023.

Ko, Y., Rempel, A., Meier, B., Buson, I.L., Sperenza, P., Ribe, R. Yu, Y.* 2022. *Designing Place-Based Renewable Energy Infrastructure Exploring Opportunities and Challenges for the Pacific Northwest Region*. Workshop Briefing Document. University of Oregon. Prepared for the Pacific Northwest National Laboratory

Winguth, A. Lee, J., Ko, Y. and the North Central Texas Vulnerability Assessment Team, 2015. Climate Change/Extreme Weather Vulnerability and Risk Assessment for Transportation Infrastructure in Dallas and Tarrant Counties, Submitted to the Federal Highway Administration.

Other Publications

Park, T., Choi, Y. R., Ko, Y., Kim, N., Oh, D., & Moores, N. (2025). Airport plan imperils South Korea's tidal flat. *Science*, 387(6736), 834-835.

O'Neil, R., Preziuso, D., Arkema, K. Ko, Y., Pevzner, N. Dimond, K. Gore, S., Morrice, K. Henderson, C. and Powell, D. 2022. *Renewable Energy Landscapes: Designing Place-Based Infrastructure for Scale* (PNNL-32680). Pacific Northwest National Laboratory, Richland, Washington. Prepared for the U.S. Department of Energy.

Pevzner, N., Ko, Y., and Dimond, K. 2021. Power Player. *Landscape Architecture Magazine*, June 2021

Ko, Y. and Parker, C.2020. Landscape Architecture Tackles Homelessness and Shelter in the Pandemic, *ASLA The Field (Top 10 most read article of 2020)*

Lynn, D.* and Ko, Y. 2020. *Climate Action Recommendations for the City of Silverton, Oregon*. Sustainable Cities Institute. University of Oregon

Ko, Y. and Drumm, A. 2015. Transportation's Vulnerability to Weather Extremes. *EarthPeople Media*.

Ko, Y. and Schubert, D.K. 2011. South Korea's plans for tidal power: when a "green" solution creates more problems. *NAPSNet Special Reports*.

Ko, Y. and Schubert, D.K. 2011. "Green" New Deal projects threaten Korea's rivers and tidal flats. *World Rivers Review* 26(3):15.

Thesis / Dissertation

Ko, Y. 2012. The Energy Impact of Urban Form: An Approach to Morphologically Evaluating the Energy Performance of Neighborhoods, Ph.D. Dissertation, University of California, Berkeley (Advisor: Dr. John D. Radke).

Ko, Y. 2007. A Comparative Study of Urban Open Spaces in Seoul and Pyongyang: Towards Sustainable Cities in the Unification Era, Master Thesis, The Graduate Institute of Peace Studies, Kyung Hee University (Advisor: Dr. M. Jae Moon).

HONORS, AWARDS, & FELLOWSHIPS

External Recognition

2024	2023 EPA Campus RainWorks Challenge Winner – Faculty advisor to the 1st-place team (\$5,000)
2023	Council of Educators in Landscape Architecture (CELA) Excellence in Service Learning (Sr. Level)
2020	CELA Excellence in Research and/or Creative Practice Award (Jr. Level)
2019	2018 EPA Campus RainWorks Challenge Winner – Faculty advisor to the first-place team (\$3,000)
2016	Rotary Club Professor of the Year - Excellence in Higher Education Award
2009	Graduate Women In Science Eloise Gerry Fellowship

Campus Recognition

2024	UO Sustainability Research and Scholarship Award (\$500)
2024	UO Global Justice Award (\$21,881)
2023	UO Environmental Initiative Faculty Fellow (A course release)
2022	UO DEI COVID Recovery Award (\$20,000)
2021	UO Williams Fund (\$16,140 with Yizhao Yang)
2019	UO Faculty Research Award (\$5,500)
2019	UO Town and Gown Sustainability Award
2018 – 2019	UO Sustainability Faculty Fellow (\$2,000)
2018	UO Sustainability Award for Excellence in Teaching - Honorable Mention
2016	UO New Junior Faculty Research Award (\$2,000)
2016	UTA CAPP Stars for Shining Ever So Brightly Award
2016	UTA Faculty Senate Travel Award (\$500)
2013 – 2014	UTA Community Service Learning Faculty Fellow (\$2,000)
2012 / 2015	UTA Office of Sustainability Travel Support Grants (\$1,000)
2011	UCB Beatrix Farrand Dissertation Research Grant
2011	UCB Graduate Division Summer Grant
2010	UCB Dean's Normative Time Fellowship
2008 – 2011	UCB Beatrix Farrand Travel Grant (multiple awards)
2007 – 2009	UCB Dept. of LAEP Block Grant (multiple awards) <i>Along with Graduate Student Researcher/Instructor Assistantships</i>
2007	KYUNG HEE UNIVERSITY Overseas Study Scholarship
2005 – 2007	KYUNG HEE UNIVERSITY All-Expense Paid Award <i>Full tuition, travel, room & board support for all semesters</i>
2002 / 2001	KOREA UNIVERSITY Best Honors Scholarship
2002	KOREA UNIVERSITY Honors Scholarship

SELECTED RESEARCH GRANTS

2025 – 2026 (Pending)	STATE OF OREGON DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT (PI, \$397,837) "Rainy Days, Nature's Ways: Embracing Green Infrastructure and Education at The Village School"
2022 – 2027	NATIONAL SCIENCE FOUNDATION (Co-PI, \$1,549,219) "Dynamics of Integrated Socio-Environmental Systems (DISES): Integrating environmental justice into urban forest assessment and valuation tools" (PI. Dr. Alexandra Ponette, University of Utah)

- 2022 – 2025 **US DEPARTMENT OF INTERIOR AND BUREAU OF LAND MANAGEMENT (Co-PI, \$499,990)**
“Grow back better: Social and ecological factors shaping wildfire recovery on nonindustrial private forestlands” (PI. Dr. Heidi Huber-Stearns)
- 2022 **US DEPARTMENT OF ENERGY WATER POWER TECHNOLOGY OFFICE (PI, \$50,000, through the PNNL Joint Appointment)**
“Developing an energy justice framework for assessing the social and economic impacts and opportunities of marine energy: The case of PacWave in Lincoln County, Oregon”
- 2022 **US DEPARTMENT OF ENERGY WATER POWER TECHNOLOGY OFFICE / PACIFIC NORTHWEST NATIONAL LABORATORY (PI, \$70,000)**
“Multifunctional design potentials of renewable energy co-locations in the Pacific Northwest”
- 2022 **HOMELESS GARDEN PROJECT (PI, \$8,536)**
“Sharing Three Decades of HGP Learning with Everyone Village”
- 2020 **UO Inaugural Resilience Initiative Interdisciplinary Seed Funding (PI, \$50,000)**
“Integrated Social, Environmental and Economic Justice Framework to Build Resilient Communities for Vulnerable Unhoused Populations”
- 2019 – 2020 **ASIA-PACIFIC NETWORK FOR GLOBAL CHANGE RESEARCH Collaborative Regional Research Programme (Collaborator, \$41,900)**
“Assessment of the actual and potential contributions of smart city projects to climate resilience in selected Asia-Pacific cities”, Project PI - Dr. Ayyoob Sharifi (Hiroshima University)
- 2019 – 2020 **UO FOUNDATION Trustee Excellence Fund (PI, \$30,000)**
“Landscape for Humanity: Multifunctional landscapes co-designed for vulnerable urban populations” with co-PIs: Kory Russel, Jacques Abelman, and Junhak Lee
- 2018 – 2020 **NATIONAL SCIENCE FOUNDATION (PI, \$38,126)**
“Intra-Urban Variability in Black Carbon Deposition: Rates, Pathways, and Determinants” Subaward of the NSF-CAREER grant, PI Dr. Alexandra Ponette (University of North Texas)
- 2017 – 2018 **NATIONAL GEOGRAPHIC SOCIETY Science and Exploration Grant – Asia (Co-PI, \$30,000)**
“Solar Energy vs. Critical Habitats: Resolving “green” conflicts for conserving endangered Black-faced Spoonbill habitats in Taiwan” PI Dr. Hsiao-Wen Wang (National Cheng Kung University)
- 2015 – 2016 **UTA Inaugural Interdisciplinary Research Program (PI, \$17,880)**
“The Dallas-Fort Worth Community Opportunities for Resilience Education (DFW-CORE): Climate Science Education Model for the Public and K-12” with co-PIs: Seo, Arne, and Yoon
- 2015 – 2016 **UTA CAPP What’s NEXT Seed Grant (PI, \$10,000)**
“Develop a Green Infrastructure Index: Comprehensive Metrics to Measure Ecological and Social Services of the Urban Landscapes”
- 2014 – 2015 **NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (Co-PI, \$43,360)**
“Climate Change/Extreme Weather Vulnerability and Risk Assessments for the Dallas-Fort Worth Regional Transportation Infrastructure” PI Dr. Arne Winguth (UT Arlington)
- 2013 – 2014 **USDA FOREST SERVICE PSW RESEARCH STATION/UC BERKELEY (PI, \$28,363)**
“Monitoring and Modeling Tree Growth, Longevity, and Performance” Phase II Subaward

OTHER RESEARCH EXPERIENCE

- 2008–present **SAVE INTERNATIONAL (a project of EARTH ISLAND INSTITUTE)**
Korea project coordinator for ecological planning and design projects for preserving the Black-faced Spoonbill (an endangered species) habitats in South Korea

- 2008 – 2009 **CENTER FOR GLOBAL METROPOLITAN STUDIES, UC BERKELEY**
Graduate student researcher / spatial data analyst (PI– Elizabeth Deakin) for TOD projects in Central Valley, CA and Jinan and Chengdu, China
- 2007 **DEPT. OF LANDSCAPE ARCHITECTURE AND ENV. PLANNING, UC BERKELEY**
Graduate Student Researcher (PI –John Radke) for conducting extensive literature reviews on the trends in urban growth/land use models
- 2007 / 2005 **KOREA ENVIRONMENT INSTITUTE**
Research Assistant for the Sustainable Development Research Team (PI –Jang Min Chu) and the Environmental Management Research Team (PI – Sang Won Bang)

TEACHING EXPERIENCE**UNIVERSITY OF OREGON**

- LA 410/510 Global Sustainability (Multi-institutional online course) FA 2023, FA 2024
Instructor
- LA 699 Master's Project Clinic FA 2023, FA 2024
Instructor
- LA 440/540 Introduction to Landscape Planning Analysis SP 2019, SP 2020, SP 2021, SP 2022
Instructor
- LA 4/510 Design for Climate Action (New course development) WT 2020, WT 2022
Instructor, Sustainable City Year Program partnering with the City of Silverton, SquareOne Villages, Everyone Village
- LA 4/594 Landscape Planning and Design Studio FA 2019, FA 2020
Co-Instructor, partnering with the City of Eugene Manager's Office (2019) and the City of Portland Bureau of Planning and Sustainability
- LA 459/559 Sustainable Energy Landscapes SP 2018, WT 2019
Instructor Featured in Oregon Quarterly, Summer 2018
- LA 410/510 Urban Sustainability FA 2017, FA 2018
Instructor, partnering with the City of Eugene Park and Open Space
- LA 4/594 Landscape Planning and Design Studio FA 2017
Co-Instructor, Sustainable City Year Program partnering with the TriMET
- LA 606 Sustainable Cities and Landscapes International Conference FA 2017 (zero-week)
Instructor

UNIVERSITY OF TEXAS AT ARLINGTON

- CIRP 5308 Metropolitan Sustainability and Plan Making SP 2016, SP 2015, SP 2014, SP 2013
Instructor
- CIRP 5350 Environmental Planning SP 2016, SP 2015, SP 2014
Instructor
- CIRP 5327 Introduction to Green Cities & Transportation FA 2015, FA 2014, FA 2013
Instructor
- CIRP 4320 Sustainable Communities FA 2014, FA 2013, SP 2013
Instructor Featured in the UTA Magazine Fall 2014 as a "crash course"

UNIVERSITY OF CALIFORNIA, BERKELEY

Landscape Architecture & Environmental Planning Colloquium (Graduate) <i>Instructor as a Graduate Student Instructor</i>	FA 2011
Computer Applications in Environmental Design (Undergraduate/Graduate) <i>Co-Instructor</i>	SP 2011
Environmental Planning Studio (Graduate) <i>Module Co-Instructor</i>	SP 2011, SP 2010
Geographic Information Systems (Undergraduate/Graduate) <i>Graduate Student Instructor</i>	FA 2009, FA 2008

CONFERENCE PRESENTATIONS (*denote graduate students)**Peer-reviewed (Presenter)**

- "Configuring The Energy Layer: Landscape's Role in the Energy Transition" Panel Presentation with Nicholas Pevzner, Jasper Hugtenburg, and Rebecca O'Neal, Abstract accepted to the Annual Conference of the Council of Educators in Landscape Architecture (**CELA**), March 2025.
- "Flyways as Pathways: Collaborative Ecological Planning Framework for a Biosphere Reserve" Panel Presentation with Randy Hester, Florencia Sepulveda Trucco*, Miyeon Yoo, and Sohyun Park. **CELA**, March 2025.
- "Bridging Borders: Global Engagement and Interdisciplinary Collaboration in Design Education" Panel Presentation with Yizhao Yang, Elise O'Brien*, and Chingwen Cheng. **CELA**, March 2025.
- "Designing for Energy Transition: The Opportunity of Renewable Energy Landscapes" American Society of Landscape Architects (**ASLA**) Annual Conference, Washington, D.C., October 2024. Panel Presentation with Nicholas Pevzner and Jasper Hugtenburg
- "Houselessness in Urban Landscapes: Design Actions for Inclusive Spaces, **CELA**, Santa Ana Pueblo, NM (Virtual), March 2022. Panel Presentation with Cory Parker, Jeff Hou, Briana Meier, and Jessica Gonzalez*
- Landscape and the Energy Transition: Expanding Landscape's Role within Energy Infrastructure Planning and Design, **CELA**, Santa Ana Pueblo, NM, March 2022. Panel Presentation with Nick Pevzner and Kirk Dimond
- "Resolving Conflicts of Greens in Energy Landscapes: The Role of Innovative Design and Spatial Planning". **CELA**, Sacramento, CA, March 2019.
- "Landscape for Humanity: New design pedagogies for critical landscape engagement". **CELA**, Sacramento, CA, March 2019. with J. Abelman and K. Russel
- "Trees for conserving energy: Knowns and unknowns". **CELA**, Beijing, China. May 2017.
- "Landscape planning framework for disaster management". The Pacific Risk Management 'Ohana (PRiMO) Conference, Honolulu, HI. March 2017.
- "Zero net energy communities: the feasibility of meeting residential and vehicle energy demand by on-site solar energy supply". **ACSP**, Houston TX. October 2015.
- "Long-term effectiveness of urban tree planting initiatives: a 20-year evaluation of the Sacramento Shade tree program". **ACSP**, Philadelphia, PA. November 2014.
- "Quantifying the impacts of urban form on residential cooling energy use: the case of Sacramento, California". Presented at **ACSP**, Cincinnati, OH. November 2012.
- "The effects of urban trees on residential solar photovoltaic potential: the case of San Francisco, CA". **CELA**, Los Angeles, CA. March 2011.
- "Conflicting greens: Systematic Greens, Segmented Greens, and False Greens". **CELA**, Los Angeles, CA. March 2011.

Peer-reviewed (co-authored)

- "Evaluating Landscape Performance of Multifunctional Urban Rooftops: A Comparative Assessment of Green Roofs, PV Systems, and Biosolar Roofs." With Yeongseo Yu (primary presenter)* and Junhak Lee. Abstract accepted to **CELA**, March 2025.
- "Exploring Design Parameters for Enhanced Cooling Performance of Urban Biosolar Roofs". With Yeongseo Yu (primary presenter)* and Junhak Lee. Abstract accepted to **CELA**, March 2025.
- "Biosolar Roofs in Urban Environments: A Comparative study with Green and PV Roofs Using Simulation and Field Measurement" **CELA**, St. Louis, MO, USA. March 2024. With Yeongseo Yu (primary presenter)* and Junhak Lee
- "Community Engagement during COVID-19: A Review of the Emerging Literature and a Case Study of Opportunity Village in Eugene, Oregon", Annual Conference of the Association of Collegiate Schools of Planning (**ACSP**), Miami, FL (Virtual), October 2021. with Briana Meier (primary presenter)* and Barbara Muraca
- "Community Engagement during COVID-19: A Review of the Emerging Literature and a Case Study of Opportunity Village in Eugene, Oregon", Annual Conference of the Environmental Design Research Association (**EDRA**), Detroit, MI (Virtual), May 2021. with Briana Meier (primary presenter)* and Barbara Muraca
- "Resilient and Multifunctional Energy Landscapes for a Green New Deal", **CELA**, Santa Ana Pueblo, NM (Virtual), March 2021. with Nick Pevzner (primary presenter) and Kirk Dimond
- "Modeling Black Carbon Removal by City Trees: Implications for Urban Forest Planning" **CELA**, Santa Ana Pueblo, NM (Virtual), March 2021 with Evan Elderbrock (primary presenter)* et al.
- "A Landscape Approach to the Conflicts of "Greens": Planning for Energy and Wetland Land-Use Growth in Southwestern Taiwan's Coastal Landscape in a Climate-Changing Era", **CELA**, Santa Ana Pueblo, NM (Virtual), March 2021. with William Lien (primary presenter)*
- "Prioritizing Underserved Communities for Thermal Comfort Street Retrofit in Eugene", OR, **CELA**, Santa Ana Pueblo, NM (Virtual), March 2021, with Po Ying Hsu (primary presenter)*
- "Urban Design Framework for Sustainable Energy Landscapes: The Case of Portland, Oregon", **CELA**, Santa Ana Pueblo, NM (Virtual), March 2021 with Alison Grover (primary presenter)*
- "Urban Agrivoltaics: Typological Explorations within the Urban Realm", **CELA**, Santa Ana Pueblo, NM (Virtual), March 2021, with Aaron Woolverton (primary presenter)*, Poster Presentation
- "Offshore Wind and the Green New Deal". **CELA**, Santa Ana Pueblo, NM (Virtual), March 2021, with Caroline Fitzpatrick (primary presenter)*, Poster Presentation
- "Bridging the gap in climate action planning: Policy maker perception v. public opinion". **ACSP**, Portland, OR. November 2016. with Ann W. Foss (primary presenter)*

Others

- "Growing Resilience: Engaging Unhoused Communities in Urban Greening and Climate Action", Climate Clashes | Climate Governance | Climate Justice Conference, Global Studies Institute, University of Oregon, October 2024
- "Developing a Place-Based Global Sustainability Competency Learning Model: a case study of a summer study program in the Galapagos, Ecuador", **APRU SCL**, August 2024, with Yizhao Yang (primary presenter) and Jaime Eduardo López Andrade
- "Benefits and Challenges of the Photovoltaic-Green Colocation in an Urban Context", **APRU SCL**, The University of Hawaii, Manoa, USA. August 2022. With Yeongseo Yu (primary presenter)*
- "A Review of the Attributes of Successful Agri-photovoltaic Projects" **APRU SCL**, The University of Auckland, New Zealand,(Virtual). December 2021. With Yeongseo Yu (primary presenter)*
- "Measuring climate and extreme weather literacy in politically conservative regions: The case of Dallas-Fort Worth". Association of American Geographers (**AAG**) Annual Meeting, San Francisco, CA. March 2016.

“Long-term survival of Sacramento Shade trees and its influence on energy-saving performance: Empirical evidence and implications for urban planning”. Livable Communities Through Urban Forestry Conference, Washington, D.C. August 2015. *(Invited)*

“Does greening pay off?: Long-term performance of shade trees in Sacramento, CA”. **AAG**, Chicago, IL. April 2015.

“Climate change/extreme weather vulnerability and risk assessments for the Dallas-Fort Worth regional transportation infrastructure”. Climate Resilience & Adaptation Symposium, Arlington, TX. February 2015.

“On-site solar energy utilization in cities: location matters”. **AAG**, New York, NY. February 2012

“City-wide on-site solar energy assessment: the case of the City of San Francisco”. Berkeley Energy and Resources Collaborative Symposium, Berkeley, CA. October 2011. (Poster Presentation)

“Preserving vibrant habitat: co-mingling urban and natural resources in Hakata Bay, Japan, and its implication for Incheon, South Korea”. Symposium for Conservation of Black-faced Spoonbills and International Network, Ganghwa, South Korea. May 2011.

Working Session and Conference Organization

Organizer, APRU Sustainable Urban Design Webinar, October 2024

Organizer, APRU Biodiversity of Sustainable Cities Webinar, October 2024

Organizer, APRU Sustainable Cities and Landscapes Webinar Series (12 webinars), 2021-2022

Working Group Co-Leader, “Renewable Energy Landscapes” Working Group, APRU Sustainable Cities and Landscapes Conference, Sydney, September 2019.

Working Group Leader, “Saving Spoonbills in the era of Conflict of Greens”, Great Asian Street Symposium (GASS), Singapore, December 2018.

Working Group Leader, “Resilient Grids and Communities”, APRU Sustainable Cities and Landscapes Conference, Hong Kong, September 2018.

Working Group Leader, “Resolving Conflicts of “Greens”: Energy Planning for Sustainable Landscape Conservation”, APRU Sustainable Cities and Landscapes Conference, Portland, OR, September 2017.

Co-Organizer, Inaugural APRU Sustainable Cities and Landscapes Conference, Portland, OR, September 2017

Organizer, Paper session on “Risk Perception and Resilience Planning”, **AAG**, San Francisco, CA, March 2016.

Panelist, Panel on “The Myth of Smart Urbanism: Songdo City and Beyond”, **AAG**, San Francisco, CA, March 2016.

Moderator (invited), Paper session on “Planning for the Future: Green Cities of the Future”, Livable Communities Through Urban Forestry Conference, Washington, D.C. August 2015.

EXTERNAL INVITED TALKS

“Urban Trees to Solar Farms: Exploring Untapped Potentials of Ecological Design in Climate Actions” School of Environment and Sustainability, University of Michigan, Ann Arbor, MI, November 2024

“Rainy Days, Nature’s Way: Embracing Stormwater and Play at the Village School. EPA Campus RainWorks Challenge Webinar (Virtual), EPA, November 2024

“Integrating Renewable Energy into Built Environment and Landscapes: Synergies and Trade-offs”. Seoul National University Graduate School of Environmental Studies, Seoul, South Korea, February 2023

“Urban Renewable Energy for Climate Action”. International Speaker Seminars. Hanyang University Graduate School of Urban Studies (Virtual), Seoul, South Korea, January 2023

“Resolving Conflict of Greens: Case Studies and Best Practices for Integrated Renewable Energy Planning” 2022 Mattauw International Workshop. Tainan, Taiwan, December 2022

- “Renewable Energy Landscapes and Ecosystem Services: Synergies and Trade-offs”. Graduate Seminar on Ecological Design. Korea University, Seoul, South Korea, December 2022
- “Renewable Energy Landscapes”. Environmental Science. Korea University, Seoul, South Korea, November 2022
- “APRU SCL Hub: Shared Curriculum” APRU Sustainable Cities and Landscapes Conference, Honolulu, August 2022. With Yizhao Yang
- “Landscape for Humanity: Design action for climate justice”. DEI Seminar. Korean-American Landscape Architects Association (Virtual), 2022
- “APRU SCL: Our Approach”. Global Sustainability Online Course. Nanyang Technological University (Virtual), Singapore, March and September 2022
- “Landscape for Humanity: Co-designing multifunctional landscapes for climate injustice”. University of Connecticut PSLA Seminar Series (Virtual), November, 2021.
- “Landscape for Humanity: Landscape architects tackle Homelessness and climate injustice”. ASLA Climate Action Webinar on Pacific Northwest Region (Virtual), with Jessica Gonzalez and Kennedy Rau, October, 2021.
- “Energy Transition for Climate Resilience: Lessons from the Pacific Rim”. Plenary Speaker at the International Conference on Human Settlements Planning and Development, University of the Philippines Los Baños (Virtual), October, 2021.
- “Multifunctional Landscape Approach to Place-based Energy Transition”. Pacific Northwest National Laboratory (PNNL), (Virtual), August, 2021.
- “Urban Energy Landscapes for a Resilient Future”. International Symposium: One Health and One Earth for Sustainable Future, Korea University (Virtual), August, 2021
- “Renewable Energy Landscapes for a Green New Deal. International Speaker Series, Pusan National University (Virtual), June, 2021.
- “Landscape for Humanity: How Landscape Architects Tackle Homelessness”. LA Bash Conference, Cornell University, Ithaca, NY (Virtual). April, 2021.
- “Landscape for Humanity: Multifunctional Landscapes co-designed for Vulnerable Populations”. ASLA Colorado Student Chapter, UC Denver (Virtual). April 2021.
- “Built Environment Resilience” in Module 4b Urban Resilience in UN Asia-Pacific Mayors Academy. Bangkok, Thailand (Virtual). with Aditi Khodke, IGES, Japan.
- “Landscape Planning and Design for Sustainable Energy Transition”. Pusan National University, Pusan, South Korea (Virtual). January 2021.
- “Environmental Planning and Design for the Climate Changing Era”. Korea University, November, 2020.
- “Resilience for Vulnerable Communities”. Virtual Guest Lecture, ED 301, Arizona State University (Virtual), Phoenix, AZ. November 2020.
- “Landscape for Humanity: Multifunctional Landscapes co-designed for Vulnerable Populations”. SDC Distinguished Guest Lecture, School of Design and Construction, Washington State University, Pullam, WA. February 2020.
- “Conflicting Greens around Korean rivers and coastal wetlands: Implications for a systematic water and coastal management”. International Interdisciplinary Faculty Water Management Seminar Series, UC Berkeley, California. February 2019.
- “Conflict of Greens: Global perspectives,” at the Participatory Coastal Planning for Resolving the Conflicts of Greens (a short course), National Cheng Kung University. Tainan, Taiwan. March 2018.
- “Socioeconomic and policy implications from long term monitoring of Sacramento Shade trees”, Urban Green Infrastructure Summit. Tigard, OR. February 2018.
- “Monitoring urban trees: Survival, growth, and energy-saving performance” co-present with L.A. Roman and P. Smith for the USDA Forest Service Urban Forest Connections Webinar Series. March 2016.

- “Landscape design and planning for the era of climate change”, Department of Landscape Architecture, School of Architecture and Allied Arts, University of Oregon, Eugene, OR. February 2016.
- “Does tree planting pay us back?: Lessons from long-term monitoring of Sacramento Shade Trees”, Ph.D. Seminar, Department of Landscape Architecture, School of Architecture and Allied Arts, University of Oregon, Eugene, OR. February 2016.
- “Quantitative methods in landscape architecture and environmental planning”, LAND 6900 Research Strategies, College of Environment + Design, The University of Georgia, Athens, GA. September 2015.
- “Long-term survival, growth and energy performance of Sacramento Shade Trees”, USDA Forest Service Pacific Southwest Station, Davis, CA. July 2015.
- “Do urban forms matter in residential energy consumption?: an empirical approach”, Department of Environmental Science and Ecological Engineering, Korea University, South Korea. December 2014.
- “Environmental and ecological planning for the era of climate change”, Graduate School of Environmental Studies, Seoul National University, South Korea. December 2014.
- “Energy and Built Environment: the effect of urban form on residential energy use in Sacramento, CA”, Department of Geography, University of North Texas, Denton, TX. November 2013.
- “Solar sprawl vs. compact neighborhoods: assessing sustainable urban density”, Knowlton School of Architecture, The Ohio State University, Columbus, OH. March 2012.
- “Energy planning for the 21st century: assessing optimal urban forms toward energy self-sufficient cities”, School of Urban and Public Affairs, UT Arlington, TX. February 2012.
- “Shifting ground: new challenges of environmental planning in the era of climate change”, School of Urban and Public Affairs, UT Arlington, TX. February 2012.
- “Is renewable energy always green?: The case of tidal power projects in South Korea”, AYUSA World Leaders Summer Program, Berkeley, CA. August 2011.

SERVICE TO PROFESSION

Association of Pacific Rim Universities (APRU) International Secretariat (2016 – present)

Sustainable Cities and Landscapes (SCL) Hub Program Director and APRU SCL Steering Committee

United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP) and UN-Habitat (2019 – 2021)

The Asia-Pacific Mayors Academy Technical Advisory Group for Curriculum Development; Co-Instructor for Urban Resilience Module in 2021

Manuscript Reviewer (2012- present)

Nature Energy, Renewable Energy, Applied Energy, Building and Environment, Springer (book proposal), Landscape and Urban Planning, Journal of Planning Literature, Environment and Planning B, Journal of Planning Education and Research, Land Use Policy, Cities, Energy and Buildings, Cities and Environment, Urban Forestry & Urban Greening, Arboriculture and Urban Forestry, Urban Design International, Energies, IEEE Transactions on Systems, Man and Cybernetics: Systems, Transport Policy, International Journal of Sustainable Transportation, Journal of Urban Planning and Development, Ocean and Coastal Management

Conference Review Committee

2020 APRU Sustainable Cities and Landscapes Ph.D. Symposium, Auckland, New Zealand; 2019 CELA Conference, Sacramento, California; 2018 CELA Conference, Blacksburg, Virginia; 2017 CELA Conference, Beijing, China; 2017 PRiMO Conference, Honolulu, Hawaii

External Invited Design Studio/Capstone Project Review

UC Berkeley LA 205 Environmental Planning Studio (Spring 2024, Spring 2022 - virtual, Spring 2019)

UW LArch 501 Scan Design Interdisciplinary Master Studio (Fall 2021 - virtual)
The University of Hong Kong Division of Landscape Architecture Public Review (Spring 2021 - virtual)

SERVICE TO DEPARTMENT/ COLLEGE / UNIVERSITY

University of Oregon

University

APRU Sustainable Cities and Landscapes (SCL) Hub Director (2016-2025)
Center for Asia and Pacific Studies Board (CAPS) Advisory Board (2019 – 2021)
APRU SCL Inaugural Conference Organizer (2016-2017)
APRU SCL Hub Steering Committee (2016-present)
Korean Studies Working Group (2018-present)

College of Design/ School of Architecture and Environment / Department of Landscape Architecture

HOPES Conference (college-wide student-led conference) Faculty Advisor (2024-2025)
Search Committee Chair for a Visiting Assistant Professor and for a Department Head searches (2024-2025)
College of Design Faculty Advisory Committee (2023-2025)
Director of Graduate Studies (2023-2024)
Director of Undergraduate Studies (BLA) (2017 - 2022)
Faculty Review Committee (2021, 2024)
BLA Admission Committee (2018 - 2022)
PhD Committee (2016 - present)
Curriculum Committee (2020-2021)
MLA Admission Committee (2017, 2024)
Faculty Advisor for a student group: Design for Climate Action

University of Texas at Arlington

University

UTA President's Sustainability Committee on Curriculum Research and Community Engagement (2012 to 2016)
UTA Community Service Learning Faculty Fellow (2013-2014)

College / Department

CAPPA Visiting Scholar Review Committee (Spring 2016)
Planning and Landscape Architecture (PALA) Search Committee (Fall 2015 – Spring 2016)
The College Creation Team (Spring 2015)
City and Regional Planning (CIRP) Search Committee (Fall 2014 – Spring 2015)
Urban Affairs and Policy (MUAP) Curriculum Committee (Summer 2014 – Spring 2015)
CIRP Re-accreditation/ Curriculum Committee (Fall 2012 – Spring 2016)
Urban Planning and Public Policy (UPPP) Curriculum Committee (Fall 2012 – Spring 2016)

COMMUNITY SERVICE / OUTREACH

LANDSCAPE FOR HUMANITY, Co-Founder and Project Lead (2019 – present)
SAVE INTERNATIONAL (a project of Earth Island Institute), Executive Member (2008 – present)
KOREA UNIVERISTY GLOBAL ECO-LEADER EDUCATION CENTER, Advisory Board (2021-2024)
ASLA PACIFIC NORTHWEST CLIMATE ACTION COMMITTEE, Member (2021-2022)
Community Service Learning Projects partnering with (Fall 2012 to present):

Everyone Village
Public Works Department, CITY OF SIVERTON
City Manager's Office, CITY OF EUGENE
SquareOne Villages
Park and Open Space, CITY OF EUGENE
Better Eugene-Springfield Transportation (BEST)
TRIMET and Planning and Sustainability, CITY OF PORTLAND (through Sustainable City Year Program)

Planning Department, CITY OF MCKINNEY
Community Development & Planning Department, CITY OF ARLINGTON
Parks & Recreation Department, CITY OF ARLINGTON
Environmental Services and Sustainability, CITY OF DENTON
Community Development Department, CITY OF KENNEDALE
Planning Department, CITY OF PLANO
Outdoor Learning Education, EAST FORT WORTH MONTESSORI ACADEMY
Composting, UTA OFFICE OF SUSTAINABILITY
Committee, HEART OF ARLINGTON NEIGHBORHOOD ASSOCIATION
Science Learning Center, RIVER LEGACY FOUNDATION
Riverside Sustainable Development Committee, FELLOWSHIP OF THE ARTS
INCLUSIVE DFW CONSORTIUM, founding member, invited (September 2015 – present)
NORTH TEXAS RENEWABLE ENERGY GROUP DFW Solar Home Tour, host (October 2012, October 2015)
CHINA-KOREA YOUTH CENTER FOR FUTURE FOREST, Korean delegate (April 2006)
GRADUATE INSTITUTE OF PEACE STUDIES, Co-President of Student Council (Spring 2006)
UNESCO VOLUNTEER FOR PEACE, Volunteer for Food Not Bombs/permaculture, Petaluma, CA (July 2003)
ECOFILES (Student environmental organization at Korea University), founding member (2002 – 2005)

GRADUATE STUDENT SUPERVISION & ADVISING

Students Individually supervised (Committee Chair)

Doctoral Student (Status)

1. Yeongseo Yu (2019-2025)
2. Suji Kim (Fully funded visiting PhD candidate from the Korea Advanced Institute of Science and Technology, KAIST, Fall 2019)
3. Foss, Ann (2014-2016)

Masters Students (Graduation option, Completion date)

1. Jessica Gonzalez (Masters Project, June 2022)
2. Alison Grover (Masters Project, June 2021)
3. Caroline Fitzpatrick (Masters Project, June 2021)
4. Carmela Sambo (Masters Project, June 2021)
5. Wei-Ti Lien (Masters Project, June 2020)
6. Stagi, Shelby (Masters Project, June 2019)
7. Hsu, Ivy (Masters Project, June 2019)
8. Robles, Isaac (Professional Report, December 2015)
9. Krishnakumar, Tharani Devi (Project Report, August 2015)
10. Nur, Nabila (Thesis, December 2014)
11. Peters, Derica (Professional Report, December 2014)
12. Ahn, Sang Chun (Professional Report, December 2013)
13. Harashe, Cassandra Marie (Professional Report, December 2013)

Doctoral Student Committee

1. Evan Elderbrock Dissertation Committee Member (2020-2024)
2. Evan Elderbrock Comprehensive Exam Committee Chair (Spring 2020)
3. Ellee Stapleton Comprehensive Exam Committee Chair (Spring 2019)
4. Fields, Rhonda, Field exam
5. Adil, Ali M., Field exam