



Talk Data to Me: The Intersection of Landscape Architecture + Research

(MON-B01)

OVERVIEW

Monday, Nov 22, 2021

10:30 - 11:45am CDT. Music City Center, Room 209

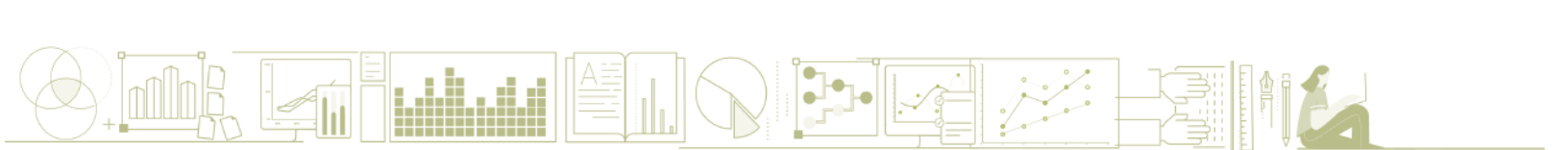
1.25 PDH, LA CES/HSW, AIA/non-HSW, AICP, FL, NY/HSW

The intention behind this panel discussion is to advocate for a more diverse, equitable, and inclusive design process by integrating data collection and analysis, before, during, and after design projects. In this session we will dive into three case studies that engage underrepresented populations in the design process, including individuals receiving chemotherapy treatments, individuals who are incarcerated, and groups of people who are unable to attend public workshops in person. The data collection methods range from physiological testing and medical reports, interviews, questionnaires, design charrettes, participatory mapping, GIS-based interactive surveys, and other community engagement efforts.

LEARNING OUTCOMES

- 1- Acknowledge the benefits of research and how it informs a more diversified, inclusive, and equitable design process.
- 2- Define and understand evidence-based research processes and methods related to landscape architecture practices.
- 3- Reflect upon ways to incorporate evidence-based research and data collection into current and future projects.
- 4- Explore ways to establish vibrant inter-, intra-, and trans-disciplinary research and design partnerships.





SPEAKERS

Peter J. Caldwell, ASLA, PLA

SENIOR DESIGNER, ASAKURA ROBINSON



Peter Caldwell is a Landscape Architect at Asakura Robinson in Houston, TX and has an educational background in Ecological Sciences & Engineering. His work focuses on barrier free solutions through an ecological design lens. He is a leader in his professional organization (ASLA) where he brings innovative educational opportunities to the state and local membership. He has spoken at the state and national level on methods for using Universal Design and unique engagement approaches to create more accessible & inclusive public spaces. His projects in Houston center on creating connections for communities by designing flexible systems that have a positive impact and are usable by all. His current work focuses on creating methods for the inclusion of data in the design process to reduce inequities and biases created through typical approaches.

Amy Wagenfeld, PhD, OTR/L, EDAC, FAOTA, Affil. ASLA

PRINCIPAL, AMY WAGENFELD | DESIGN



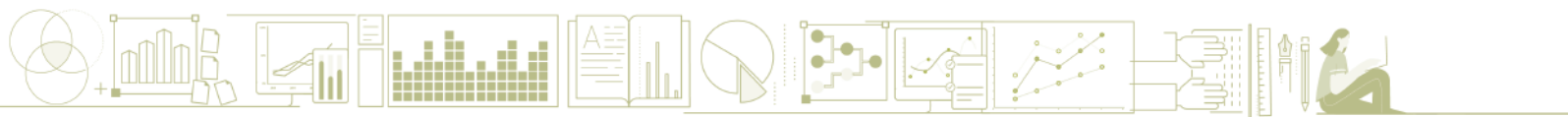
Amy's roles as an occupational therapist include therapeutic and universal design consultant, educator, researcher, and author. She is Principal of Amy Wagenfeld | Design and Assistant Affiliate Professor in the Department of Landscape Architecture at University of Washington and Lecturer in the Boston University Post-Professional Occupational Therapy Doctoral program. She is a Fellow of the American Occupational Therapy Association and holds evidence-based design accreditation and certification (EDAC) through the Center for Health Design and certification in Healthcare Garden Design through the Chicago Botanical Garden. Amy was recently awarded the American Occupational Therapy Association Recognition of Achievement for her unique blending of occupational therapy and design.

Yiwei Huang, PhD, ASLA

ASSISTANT PROFESSOR, PURDUE UNIVERSITY



Yiwei is trained as a landscape architect and urban designer, while feminist and critical geography perspectives influence her thinking of spaces and landscape. She is interested in the places with "conflicts," where local residents may share different aesthetic values, cultural practices, or ways of living, and she eagers to find how design could function as a transforming agent that could respect, facilitate, and even empower the local communities, especially those who were historically underrepresented in the planning processes.



CASE STUDIES

HOUSTON METHODIST OUTPATIENT CENTER



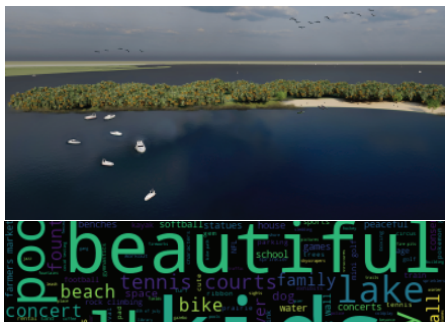
Researchers at the Houston Methodist Outpatient Center were exploring the science behind long held beliefs that nature can play an important role in the effectiveness, recovery times, as well as pain and stress management of their patients. Asakura Robinson partnered with this team to develop a rooftop garden that maximized seasonal color and visual interest from two specific treatment rooms for patients with cancer. The study looked at both psychological and physiological differences in patients in these rooms to other study participants in rooms with no view and patients utilizing virtual reality images of nature.

IOWA CORRECTIONAL INSTITUTION FOR WOMEN: THE VISITING GARDEN



More than 5 million children will experience parental incarceration at some point in their lives, an adverse childhood event that will impact their relationship with their parents and the trajectory of their lives. Parent-child visits in supportive child friendly visiting environments can benefit both the child and parent and mitigate negative future effects. Outdoor gardens and play spaces may provide such a visiting environment. A mixed method study explored the activities and uses of a visitor's garden created in collaboration with a design build studio class and incarcerated women at a women's state prison and the perceived impact on the visit. Results found that child and family activities included physical and creative play and nature engagement. Ninety percent of garden visitors indicated the garden improved their visits and identified the following as related to that impact: more child-friendly environment, improved affective experience, home-like visiting environment, and more and better parent-child interactions.

USER GENERATED SPATIAL CONTENT AND PARK DESIGN



The digital means for obtaining, sharing, and analyzing information is advanced and proliferated in the past years. Now more platforms are available that allow users who can or cannot join the traditional public hearings or community workshops to make their voices and opinions available for designers and planners. This presentation will explore two case studies to showcase two different platforms that allow user-generated spatial content. One is the use of public participatory GIS (PPGIS) in the case study of a California State Recreational Area, and the other is the use of google map user reviews to shed new light on future city-level park system design and management.



KEY TAKEAWAYS AND/OR RESOURCES

ONLINE SURVEY TOOLS

SURVEY MONKEY ([HTTPS://WWW.SURVEYMONKEY.COM/](https://www.surveymonkey.com/)) FREE BASIC PLAN

SURVEY SPARROW ([HTTPS://SURVEYSPARROW.COM/](https://surveysparrow.com/)) FREE TRIAL

TYPEFORM ([HTTPS://WWW.TYPEFORM.COM/](https://www.typeform.com/)) FREE TRIAL

QUALTRICS ([HTTPS://WWW.QUALTRICS.COM/](https://www.qualtrics.com/)) FEE BASED

GOOGLE FORMS ([HTTPS://WWW.GOOGLE.COM/FORMS/ABOUT/](https://www.google.com/forms/about/)) FREE WITH A GOOGLE ACCOUNT

OPEN SOURCE DATA TOOLS

KNIME ([HTTPS://WWW.KNIME.COM/KNIME-ANALYTICS-PLATFORM](https://www.knime.com/knime-analytics-platform)) FREE BASIC PLAN

RAPIDMINER ([WWW.RAPIDMINER.COM](http://www.rapidminer.com)) FREE DEMO

RSTUDIO ([HTTPS://WWW.RSTUDIO.COM/](https://www.rstudio.com/)) FEE BASED

DATA COLLECTION TOOLS

WHAT IS DATA COLLECTION?

([HTTPS://WWW.FORMPL.US/BLOG/DATA-COLLECTION-METHOD](https://www.formpl.us/blog/data-collection-method))

A STEP BY STEP GUIDE TO DATA COLLECTION

([HTTPS://WWW.SCRIBBR.COM/METHODOLOGY/DATA-COLLECTION/](https://www.scribbr.com/methodology/data-collection/))

WHAT ARE METHODS OF DATA COLLECTION?

([HTTPS://WWW.LOTAME.COM/WHAT-ARE-THE-METHODS-OF-DATA-COLLECTION/](https://www.lotame.com/what-are-the-methods-of-data-collection/))

LIVE POLLING APPS

SLIDO

POLL EVERYWHERE

CASE STUDY REFERENCES

Ashley Verzwuyvelt, MSN, RN , OCN et al., Effects of Virtual Reality v. Biophilic Environments on Pain and Distress in Oncology patients: A case-crossover pilot., Submitted for Publication.

Toews, B., Wagenfeld, A., & Stevens, J. (2020). Feeling at home in nature: A mixed method study of the impact of visitor activities and preferences in a prison visiting room garden. *Journal of Offender Rehabilitation*, 1-24.
<https://doi.org/10.1080/10509674.2020.1733165>

Milligan, B., Kraus-Polk, A., & Huang, Y. (2020). Park, Fish, Salt and Marshes: Participatory Mapping and Design in a Watery Uncommons. *Land*, 9(11), 454.
<https://doi.org/10.3390/land9110454>

ADDITIONAL RESOURCES

Van den Brink, A., Bruns, D., Tobi, H., & Bell, S. (2016). *Research in landscape architecture: Methods and methodology*. Routledge.

Hamilton, K. (2003). The four levels of evidence-based practice.

<https://www.healthcaredesignmagazine.com/architecture/four-levels-evidence-based-practice/>

Sachs, N. (2018). Here's some great research! Now what? Translating research into practice. *Health Environments Research & Design Journal*, 11(1) 40-42.
<https://doi.org/10.1177/1937586718757309> journals.sagepub.com/home/her