

JUDITH H HEERWAGEN, PhD

EDUCATION

1966 B.S., Communications, University of Illinois
1982 Ph.D., Psychology, University of Washington

EXPERIENCE OVERVIEW

Dr. Heerwagen is an environmental and behavioral psychologist whose work focuses on evidence-based design and the impact of the built environment on occupant health, wellbeing and performance. She served as a research psychologist in the US General Service Administration's Office of Federal High-Performance Buildings from 2009 to 2024. Prior to joining GSA, she had her own research and consulting firm where she worked with clients to integrate social science research into design projects. Her clients included both the public and private sectors organizations. She was a senior scientist at the Pacific Northwest National Laboratory and a research faculty member at the University of Washington, College of Built Environments where she is currently an affiliate faculty member in Architecture. She is co-editor of *Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life* which won the 2009 Publishers Award in architecture and urban planning. She received the 2014 Design for Humanity Award from the American Society of Interior Designers.

WORK EXPERIENCE

2009 - Research Psychologist, US General Services Administration, Office of Federal High Performance Green Buildings
2000 - 2010 Principal, J.H. Heerwagen & Associates, Inc.
2000 - 2018 Affiliate faculty, University of Washington, Department of Architecture
1994- 1999 Staff Scientist, Pacific Northwest National Laboratory
1992-94 Visiting Scientist, Battelle Seattle Research Center
1982-92 Center for Planning and Design, University of Washington
College of Architecture and Urban Planning
1966-75 Public relations and communications positions at Harvard University, Cornell University and Wellesley College.

HONORS AND AWARDS

Green Champion Award, US Center for Disease Control, 2018
World Corporate Sustainability Roundtable award, 50 Most Impactful Green Leaders 2018
Design for Humanity Award, American Society of Interior Designers, 2014
Publishers Award for best book in architecture and planning for *Biophilic Design*, 2009.
Honorary Fellow, New Ways of Working Network, 2010
Honorary Fellow, Institute of Green Professionals, 2009
EnvironDesign Magazine, Environmental Champion Award, 2005
Visiting Lecturer, Yale University, 2005
Pacific Northwest National Laboratory, Organizational Performance Award, 1999
University of Washington, Faculty Achievement Award, 1990

ADVISORY COMMITTEES AND SPECIAL EVENTS

WELL Building Standard Advisor (Mind and Research Concepts)
International Living Future Institute, Biophilic Design Advisory Committee
Committee Chair, Living Future Stephen R. Kellert Biophilic Design Award
Google, Aclima, GSA Fellows Research Program
Google Indoor Environmental Quality research program
AIA Design and Health Initiative
NIH Health in Buildings Consortium (founding member)
Environmental Defense Foundation Climate Corps
Building Technology Research and Development, National Science & Technology Council

GSA WORK

Focus on (1) implementing and testing hybrid work processes linking home, office and third places and (2) the psychological, cognitive, and social value of work.

2030 Future of Federal Work initiative to identify potential changes to work and workplace resulting from adaptations associated with the Covid-19 pandemic and emerging technologies that will further influence how and where work is done.

Health and Buildings Research Program at GSA focusing on (1) light for circadian functioning and (2) workspace design and environmental quality linked to human health and performance. Both research projects deployed wearable and stationary sensors to better understand variation in occupant outcomes across buildings and specific design features.

PRESENTATIONS AND INVITED LECTURES

Keynote, Biophilic Design, American Society of Landscape Architects, Atlantic City, 2023.
Invited speaker, NeoCon, Chicago, The Distributed Mind and Workplace Design. 2023
Invited speaker, Resilience, Health and Design. 2021, AIA Healthcare Architects
Invited speaker. Biophilic Lighting Design for Healthcare, 2021.
Invited speaker, Biophilia and Workplace Design, 2021, Environmental Design Research Association.
Invited speaker, Bio-inspired Design, 202, Design Thinkers Conference.
Invited speaker, Circadian Light and Health, 2021, University of Oregon.
Biophilic Light, 2020, invited speaker, Signify Lighting.
Biophilic Design in the Urban Context, 2020, invited speaker, Sustainability Network.
Serenbe summit on biophilic design, invited speaker, 2020
HealthDesign, invited speaker on health-focused building, 2019.
Green Build, speaker on health and performance impacts of design, 2018
Living Future, invited speaker on biophilic design, Portland, 2018
Design Lights, keynote speaker on circadian light, Portland 2018
Living Future, Biophilic Design Summit invited speaker, Seattle, 2017 and 2018
Paula Manship Endowed Lectureship, Louisiana State University, 2016

Powerful Energy, Seattle, 2013 (keynote)
Future Energy, Portland, 2011 (keynote)
Distinguished lecturer on Biophilic Design, Haworth, Inc. 2010
ASHRAE Existing Buildings, April 2010
Webinar on Biophilic Design, Cascadia GBC (with Tim Beatley and Bert Gregory), 2009
Oregon Sustainability Center Design/Research Charette, key note speaker, 2009
NBBJ health care forum, February 2008
University College London series of presentations, London, November 2007
Rethinking Sustainable Construction, Sarasota, FL, Sept. 2006.
Biophilic Design Symposium, Yale University, May, 2006.
National Institute of Health, Green Healthcare Roundtable, Washington DC, Jan. 2006
Yale University, multiple invited talks, Mar 2005
Iowa Sustainability Conference, Ames, IA, Keynote speaker, Mar. 2005
U.S. State Department/Harvard, Strategic Issues for Intelligence, Sept. 2004
Arkansas Green Building Association, May 2003, master speaker
Wisconsin Green Building Alliance, April 2003, Keynote speaker
Greenprints, Feb. 2003, Atlanta, GA, master speaker
British Columbia Psychological Association, Keynote speaker, Feb. 2002
Expert Review Panel, LEED Commercial Interior rating system, Pocantico, NY., Dec. 2000
National Academy of Sciences, Symposium on IT and Buildings, Oct. 2000
Skidmore, Owings & Merrill, Design Series on Sustainability, kick-off speaker, January 2000.
Interior Design Research Summit, La Jolla, CA, Salk Institute, October 1999
National Workshop on Workplace Productivity, USGSA, Alexandria, VA, September 1999
Expert Review Panel, LEED building rating system, Pocantico, NY, August 1999
National Academy of Sciences Workshop on Productivity, Washington DC, April 1998.

PUBLICATIONS

Book chapter on biophilic design (for 2024 publication).

Journal of Biophilic Design, article on how biophilic design influences well-being (2023.)

Co-Editor, *Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life*. 2008, New York: Wiley (with S.R. Kellert and M. Mador). Winner of 2009 Publishers Award for best book in architecture and planning.

Buildings and Health

Co-author with CM Lindberg et al, 2018. Effects of office workstation type on physical activity and stress. *Occupational and Environmental Medicine*, British Medical Journals, pp 1-7.

Biophilic Design, Health, and Well Being

J. Heerwagen, Biophilia, Design and the Adapted Mind, 2018, In *Healthy Environments/Heating Spaces* (Eds. T. Beatley, C Jones, and R. Raney) University of Virginia Press.

J. Heerwagen, 2008. *Healthy Buildings: A Proposal for a Research Initiative on Health and Indoor Environments*. Prepared for NIH, Environmental Quality Branch., Office of Research Facilities.

S.R. Kellert, J. Heerwagen and M. Mador (Eds.), 2008. *Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life*. New York: Wiley.

J. Heerwagen and B.Hase, 2001. *Building Biophilia: Connecting People to Nature*. *Environmental Design + Construction*. March/April.

J. Heerwagen and G. Orians, 2002. The Ecological World of Children. In P. Kahn and S. Kellert, *Children and Nature*. Cambridge, MA: MIT Press.

R. White and J. Heerwagen, 1998. Nature and Mental Health. In *The Environment and Mental Health*. A. Lundberg (Ed.) Mahwah, NJ: Earlbaum,

G.H. Orians and J.H. Heerwagen, 1993. Humans, Habitats and Aesthetics. In S.R. Kellert and E.O. Wilson, *The Biophilia Hypothesis*. Washington DC: Island Press.

G.H. Orians, and J.H.Heerwagen, 1992. Evolved Responses to Landscapes. In J. Barkow, J. Toobey and L. Cosmides, *The Adapted Mind*. New York: Oxford University Press.

Psychological Benefits of Design

J. Heerwagen, 2004. The Psychological Value of Space, *Whole Building Design Guide*, www.wbdg.org

J. Heerwagen, 1998. Design, Productivity and Well Being: What are the Links? Conference Proceedings, AIA Conference on Highly Effective Facilities, March 12-14, Cincinnati, OH.

J. Heerwagen, J. Heubach, J. Montgomery and W. Weimer, 1995. Environmental Design, Work and Well Being. *American Journal of Occupational Health Nurses*, 43(9): 458-468.

J. Heerwagen, 1990. Affective Functioning, Light Hunger and Room Brightness Preferences. *Environment and Behavior*, 22(5):608-635.

J. Heerwgen and G. Orians, 1986. Adaptations to Windowlessness: A Study of the Use of Visual Décor in Windowed and Windowless Offices *Environment and Behavior*, Vol 18(5): 623-629.

J. Heerwagen and D. Heerwagen, 1986. "Lighting and Psychological Comfort." *Lighting Design and Application*, Vol. 16 (4): 47-51

Human Factors of Sustainability

J. Heerwagen, 2006. Investing in People: The Social Benefits of Sustainable Design. Rethinking Sustainable Construction '06, Sarasota, FL.Sept19-22, 2006.

J. Heerwagen and L. Zagreus, 2005. *The Human Factors of Sustainability: Post Occupancy Evaluation of the Philip Merrill Environmental Center*, University of California, Berkeley: Center for the Built Environment.

J. Heerwagen, 2000. Green Buildings, Organizational Success, and Occupant Productivity, *Building Research and Information*, 28 (5/6): 353-367.

J. Heerwagen, 2000. Green Buildings and Worker Well Being. *Environmental Design + Construction*, July/August, 24-29 (invited article).

J. Heerwagen, 2001. A Balanced Scorecard Approach to Post Occupancy Evaluations: Using the Tools of Business to Evaluate Facilities. *Post Occupancy Evaluation: Where are We Now?* National Academy of Sciences, Federal Facilities Council, National Academy Press.

J. Heerwagen and J. Ouye, 1999. Strategic Commissioning. Conference Proceedings of the National Conference on Building Commissioning, Portland, OR, May 1999.

Workplace Strategy and Effectiveness

J. Heerwagen, K. Kampschroer, B. Steverson, and B. Gilligan, 2017, The People-Building Interface: It's a Two Way Street. In D. Clements-Croome, *Creating the Productive Workplace*, London: Spon Press.

K. Kampschroer, J.H. Heerwagen, and K.M. Powell, 2007. Creating and Testing Workplace Strategy. *California Management Review*, 49(2): 119-137.

J. Heerwagen, K. Kelly, K. Kampschroer, and K. Powell, 2006. The Cognitive Workplace. In *Creating the Productive Workplace*, D. Clements-Croome (ed.), London: Spon Press.

K. Kampschroer and J. Heerwagen, 2005. The Strategic Workplace: Development and Evaluation., *Building Research and Information*, 33(4): 326-337.

J. Heerwagen, K. Kampschroer, K. Powell, and V. Loftness, 2004. Collaborative Knowledge Work Environments, *Building Research and Information*, Nov-Dec, 32(6): 510-528.

J. Heerwagen, 1999. How do Buildings Affect Performance? *Energy and Environmental Management*, (invited article), Fall, 26-29.

