

Lake Superior Design Retreat Learning Objectives

March 7–8, 2025

Duluth, Minnesota

Lake Superior Design Retreat (LSDR2025)

The Lake Superior Design Retreat is a two-day event where architects and others interested in design gather together to explore design ideas and creative processes that push boundaries in the worlds of architecture, planning, engineering, the environment, and more. Six invited design professionals share their passion for their art and/or craft and discuss their creative stories and lessons learned.

1. Compare and contrast the creative process, practice philosophies, motivations, and inspirations of other design professionals to that of your own as an architect.
2. Examine design that bridges disciplines and consider how cross-disciplinary collaborations may enhance and/or redefine how we perceive architecture.
3. Explore how the use of cutting-edge technologies can revolutionize design and testing processes, while recognizing the value of creating a harmonious balance between tradition and innovation.
4. Explain the role of inference and imagination, based in historical context, in making informed design decisions.
5. Build competency in strategies for gathering and analyzing user feedback.
6. Explain cross-sensory creativity and how embracing one's authentic perception of the world can lead to groundbreaking artistic and design innovations.
7. Explore the way "juxtaposition" can impact design as it relates to the surprising ways things that shouldn't go together can go together.
8. Explore the way that design can positively impact a community.

Let There Be Light: Architecture, Light, Physiology, and Health (LSDR2025Six)

Speaker – Ali Heshmati, AIA

This presentation will examine the research of architect Ali Heshmati, AIA, a founding partner at Laboratory for Environments, Architecture, and Design (LEADinc), a collaborative interdisciplinary firm with studios in USA and Norway. The firm's guiding principle is the idea that creative architecture is rooted in the process of research, discovery, and critique of existing conventions. Attendees will explore the impact of available daylight on our brains' regulation of the circadian system and why that is important to architects and design. The presentation will explore what influences the formulation of a design concept or strategy and why the human factor is most important.

1. Discover the ways in which empathy matters in the design process and how this empathic design can result in improved public health.
2. Examine the definition of responsible design which persistently looks for ways to reduce cost and its ecological footprint while optimizing quality and positively impacting human health.

3. Explore design of the built environment and how design value is measured by its suitability for human habitation, including physical and psychological well-being.
4. Explore the importance of daylight in the built environment and its impact on our brains' regulation of the circadian system which is crucial for overall health and well-being and ensures that the body functions optimally.

A Tour of the University of Minnesota Duluth, Natural Resources Research Institute

(LSDR2025Tour)

This tour will be an opportunity for attendees to learn about an exciting array of NRRI projects, especially those focused on deconstruction and reuse opportunities, and biocarbon in materials development, coatings, and more.

1. Examine relationships between water, land and mineral resources to manage societal needs and impacts and identify ways to maintain a healthy human environment.
2. Sustainable materials. Identify how architects can benefit from the NRRI's research to develop innovative, renewable, bio-based materials that can replace petroleum-based materials reducing carbon emissions, contributing to the design of healthy buildings, sustainable cities, and communities.
3. Advanced mineral processing. Discover the developing technologies and methodologies that enhance energy efficiency and reduce wastewater flow associated with extraction, separation, and processing of iron ore and other minerals, and recognize how the results of this research can impact architectural design for a healthier built and natural environment.
4. Partnerships to meet the goals. Discuss ways in which architects can be a collaborative partner for supporting the NRRI's research with applied research solutions.