

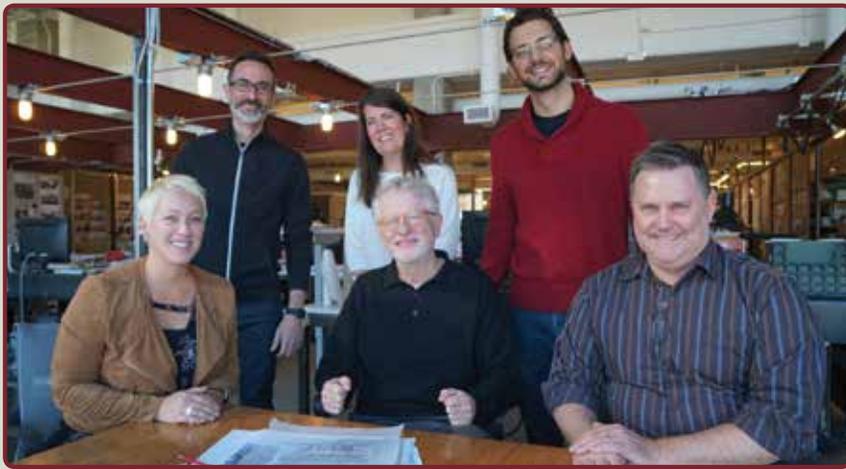


Learning Center as seen from the Donor's Arbor



Learning Center as seen from the Event Garden

## Ask the Architects



Olbrich's MSR Project Team (from the lower left, moving counter-clockwise) Traci Lesneski - Principal-in-Charge, Tom Meyer - Design Architect, Stephen Bellairs - Project Manager, Chris Wingate - Architectural Designer and Sustainability Lead, Greta Foster - Interior Designer, Brendan Sapienza - Architect

### What are some of the unique aspects of this project?

**Traci:** The capture and treatment of the water that lands on the site (i.e., rain) has been a major driver since the start of our work. The gardens are located in an important watershed for the region, and Olbrich has already done many things to protect Starkweather Creek, and to teach about sustainable garden practice. But even with that, a large percentage of the rain that lands on the buildings and surrounding hardscape flows into Starkweather Creek (and eventually Lake Monona) unfiltered. Given the City's goals for water quality, Olbrich's vision, and MSR's own goal to create a generative built environment (one that gives back to the earth), we saw a wonderful opportunity to work with stormwater management in a unique and quite special way. Water will be captured, filtered, stored and used in a manner that highlights the water cycle and allows teaching and learning around that process.

### What originally interested you about this project?

**Traci:** I had occasion to visit the gardens back when working on Madison's Central Library project, and fell in love with them. When an opportunity came to help Olbrich reach its mission and goals—and that opportunity was related to design for learning (a passion of mine)—I was immediately hooked. As I learned more about Olbrich's mission and vision during our pursuit of the project it became clear that MSR's own mission and vision are very nicely aligned with Olbrich's. We saw an opportunity to deepen learning about, and caring for, our natural world in a very meaningful way.

### What architectural elements or design features are you excited to utilize in this project?

**Tom:** The existing buildings have a pallet of natural materials: stone, wood, glass, and copper. With horizontal lines, exposed beams and hip roofs they reference the Madison area's Prairie School design traditions. This project is an opportunity to both honor the existing but also take it into the 21st Century. The new building will have a high level of sustainable performance and be a fresh but compatible interpretation of the existing buildings style and character with an emphasis on strong inside/outside connections.

### Have you encountered any challenges with the design of the learning center or greenhouse so far?

**Steve:** Balancing space desires and needs, expansion facility size, material quality, and budget, as well as—most importantly—mitigating the impact on the existing gardens, have presented a unique set of challenges. However, challenges, or parameters within which to design, often produce better, more efficient and more well thought through results, and we believe this is the case with this project. For the Learning Center, one aesthetic goal is to enable a passive space treatment system with very little visible ducting or piping. This is achievable but presents challenges in providing extremely well-engineered components that require minimal maintenance and offer spare parts availability with short lead times. We are working through these engineering challenges and have high confidence that we can provide a high performance, low maintenance and visually spectacular result.

## How will the sustainability be represented throughout the project?

**Chris and Greta:** Taking a cue from the plants that surround it, the Learning Center aims to integrate high performance strategies that minimize the building's use of resources in a way that is beautiful and experiential. In addition to our unique approach to rainwater capture and reuse, we are showcasing how buildings can respond to daylight. The building's shape is designed to capture and fill the interior spaces with daylight and views to the garden. We are developing a shading structure of cables that encourage vines to grow and filter the dappled light coming into large classroom windows facing the garden. And we are incorporating operable windows that welcome spring, summer, and fall breezes and connect the building's users to the outside environment. This helps create an interior atmosphere that feels like you are strolling through the garden itself while also saving energy by minimizing the need to power lights and heat and cool the space.

With regards to the interior finishes and materiality of this project, selections will consider such details as recycled content, impact to human health in the manufacturing as well as to the building's users, and the material's end of life cycle. Selecting materials that withstand continued high-volume use is imperative and also aligns with the project's sustainability goals. A product's maintenance requirements are just as important. Choosing materials with minimal and/or no-chemical maintenance routines also factors into our selection process.

## What defines a successful design and/or functional building to you?

**Traci:** A successful design is one that contributes to our client's ability to achieve their mission and vision, that stretches both us and our clients, and that results in a place in which—put simply—people want to be. A building can be completely functional yet not connect with people; it can also be beautiful and not function well. The best of design marries the science of systems and functionality with the art that resonates with people and compels them to linger and return to a place.

## In 20 years, what do you hope the legacy of this building will be?

**Traci:** We would like this building to be a national model for facilities that support teaching and learning about our natural world, and a tool in teaching visitors from across the country about generative design. Olbrich strives to be a leader of its peers in sustainability, from their gardens and grounds to their operations and programs. It would be wonderful if Olbrich's peers were attracted by the Learning Center building, site, gardens and water reclamation/reuse efforts, and therefore exposed to Olbrich's leadership and innovations.

## How will the buildings interact with the surrounding gardens?

**Tom:** The location of the new Learning Center is central to both the current building lobby and to the gardens. Through this project there is a great opportunity for visitors to engage the garden in new and more intimate ways. Added doors from the current lobby into a reframed courtyard will be a graceful threshold to the gardens. A new second floor outdoor terrace will provide an overview of the gardens from a new vantage point. A new outdoor teaching space will enhance learning in the gardens. And the spaces inside the new building all have large windows facing the gardens.

