



## Visualizing Global Flora

**W**e have reached the stage of visualizing what Global Flora actually will be, as the architects are putting the final touches on construction documents, the contractor is coordinating site logistics, and we are working out what will go where in these indoor landscapes, all on track to break ground in the spring!

This rendering, courtesy of Kennedy Violich Architects (KVA), depicts a view looking east through the Wet biome, with the Dry biome visible through the partition at the far end. At the other end of the Dry biome, not visible here, is the link to the Visitor Center and the pavilion housing the Durant Camellia. While the plants will be different than what's shown, the general layout of the building, the pathways and the bridge into the canopy are accurate. The curve of the building, following the track of the sun and angling up to provide height for the tallest trees in the Wet biome, and the interior topography, nestling onto the contours of the existing hill, are, to me, the architectural highlights, making the design an extraordinarily good fit for both the place and the program.

This remarkable design is made possible by the use of ETFE film as the primary glazing (as inspired by the Eden Project in the UK). Much lighter and more



flexible than glass, ETFE pillows require much less structural support, opening up new possibilities for shape and volume. With no increase in footprint or budget, we will be able to do so much more in this space. And with sustainability as a guiding principle throughout the design process, KVA entered the project into a prestigious biennial international design competition, and was honored by the LaFarge-Holcim Foundation with the Sustainable Design bronze medal for North America!

Mindful of the anticipated variety of users of Global Flora, from students and faculty conducting research, to tour groups of all ages, to staff needing to access every part, the design team has sought

to integrate many different functions smoothly into the built infrastructure while maximizing the planting area. Benches will be built into retaining walls and contain hoses and data hubs (separately!). Botany Fellow Jenn Yang '12 is working with faculty and IT experts to design the network of sensors that will provide real-time data on soil, water, and air conditions in both biomes. The data will be stored for research purposes and visualized as part of the interpretive program for visitors and anyone interested in these innovative indoor ecosystems.

In addition to the core landscape areas, the north and south walls provide

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special opportunities to grow and study plants. The tall north wall provides thermal mass for passive temperature regulation, and will be the primary home for the cryptogam collection. Ferns, lycopods, and other non-seed plants will grow on a variety of surfaces in the Dry biome and both above and below the bridge in the Wet biome, enabling close viewing of these amazingly diverse plants that otherwise could be missed in the landscape. Similarly, along the south curve in full sunlight will be table-height planters showcasing small plants of notable form, such as caudiciforms in the Dry house and carnivorous plants in the Wet house.

The deeper we get in the planning, the more the anticipation grows. Fingers crossed, next year at this time the plants should be moving in!

by Kristina Niovi Jones, Director

