

5Minutes

Dennis A. Ahlburg Trinity University's president gives the 411 on The Center for the Sciences and Innovation. ■

There's a science to teaching science, and textbooks are only one tiny part of the equation. As the New York Times reported in an article about the changes in curriculum at Boston's Massachusetts Institute of Technology "most students learn fundamental concepts more successfully, and are better able to apply them, through interactive, collaborative, student-centered learning." And so, here in San Antonio, Trinity University is redesigning the way it teaches science — both philosophically and emotionally — and the fulcrum around which the transformation is evolving is The Center for the Sciences and Innovation. Under construction since May 2010, the \$100 million, 116,000 square-foot building is the largest development ever undertaken by the university. President Dennis A. Ahlburg, Ph.D. offers some insight into project with San Antonio Business Journal readers. ■

Q Tell us about some of the exciting architectural components of the building.

A The Center for the Sciences and Innovation is the largest development ever undertaken on the Trinity campus and incorporates new construction along with major renovations of existing buildings. When completed in 2014, the 116,000 square-foot center will house one of the most extraordinary arrays of undergraduate science and engineering teaching and research facilities in the country. We will take scientists who currently work in four different buildings and make it possible for them to work literally side by side, breaking down academic barriers and causing what we think will be "productive collisions" that lead to new scientific collaboration and innovation. Faculty and students from all disciplines will be drawn to the building — as will our partners from the community. The exterior-facing glass walls will let people see inside classrooms as a way to demystify science and spark curiosity.

Q Who was involved with the planning and design?

A The concept evolved from Trinity science and engineering faculty who recognized that breakthrough discoveries in the 21st century will be increasingly interdisciplinary and entrepreneurial in nature and that the University needed to incorporate this new reality in science and engineering education. After studying science facilities around the country and absorbing input from science and engineering faculty, a committee of faculty and staff worked with the Boston firm of Einkorn Yaffee Prescott (EYP) Architecture and Engineering in partnership with the San Antonio firm of RVK Architects to develop the plans.

Q What high-tech aspects of the building have you excited?

A Perhaps the most exciting component of project is the Innovation Center, a two-story, glass-walled, multifunctional structure prominently located along the southern edge of the entry courtyard. We call it "The Cube," and it is designed to spark imagination and support collaborative projects among disciplines. It will be our "entrepreneurial engine room." Our state-of-the-art labs will be beautiful rooms in which to conduct science and will have all the safety features that you would expect in a cutting-edge building. It will be a wonderful place

to conduct science as an undergraduate and meld scientific discovery with commercial application. A dramatic entry atrium will include a café and lounge to attract students from across campus and stimulate student/faculty interaction and discourse.

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Q How do you expect the structure to change the learning at Trinity?

A The Center will allow us to maximize the talents of our students and faculty and help us attract the very best students and faculty. Every aspect of the structure has been designed with a specific purpose. For example, the juxtaposition of biology and chemistry labs reflects the interdependency of scientific disciplines that characterizes Trinity's teaching mission. Designed for flexibility, the Center will allow professors to move easily between lecture-based instruction and hands-on exploration. It also will be a hub of intellectual creativity and discovery, a place where ideas are examined, tested, and brought to fruition and where Trinity students are propelled to the exciting forefront of interdisciplinary research. It will be a place where all students and faculty, from the sciences, business, arts and humanities, incubate ideas. This interaction is the hallmark of a liberal arts education.

Q Meeting LEED criteria can be a challenge. To what level is the building aspiring and what have you learned in the process?

A We are striving to achieve LEED certification at the Gold or Silver level. Because Trinity already has achieved

LEED Gold certification on the Miller Residence Hall, we are familiar with the process and are working diligently to make the Center as green as possible. For example, the rooftop will have a green space for plants and the grounds will include a bioswale — a new concept for San Antonio that will capture rain water and shunt it through to a ground-level green area with native plants. This greenbelt will be incorporated into the campus curriculum and show the community how to be responsible in designing a South Texas landscape. When possible, we also will use native limestone and other materials. ■

