

OU Research Takes a Classical Turn



Open, fluid and imaginative, the design of the new Stephenson Center fosters cross-disciplinary interaction and exciting collaborative initiatives.

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Visible from the lobby of the Peggy and Charles Stephenson Research and Technology Center on OU's Research Campus is a reproduction of a 16th-century masterpiece by Italian Renaissance painter Raphael. *The School of Athens* depicts a stylized public building in ancient Greece, on the steps of which stand some of the greatest philosophers and scientists from the 6th century B.C. to the 12th century, surrounded by their students, discussing, debating and, naturally, teaching.

"It's a good symbol of a classical university," says T.H. Lee Williams, OU's vice president for research and dean of the Graduate College.

It also serves as the inspiration for the Stephenson Center, where faculty and students from disciplines as diverse as those represented in *The School of Athens* also discuss, debate and learn from each other.

The \$27 million facility at the corner of Jenkins Avenue and David L. Boren Boulevard, just north of Highway 9, is named in honor of the Stephensons in recognition of their \$6 million lead gift for its construction. Charles Stephenson is chairman, president and CEO of Vintage Petroleum, which merged with Occidental Petroleum during the first quarter of 2006.

Comprising nearly 95,000 square feet of both private and communal laboratory, office and general gathering space, the two-story building is configured to support rapidly changing research programs and new collaborative initiatives in biosciences, bioengineering, robotics and supercomputing.

OU faculty began moving into the Stephenson Center in spring 2004. December 2005 marked another milestone: The addition of the Institute for Environmental Genomics, composed of a premier research group led by internationally renowned scientist Jizhong Zhou and recruited from the U.S. Department of Energy's Oak Ridge National Laboratory in Oak Ridge, Tennessee, brought the center to full capacity. In the planning stage just north of the Stephenson Center is a second University research and technology building, which will add another 100,000 square feet of laboratory and office space.

Williams, who coordinates development of the Research Campus, says the idea behind the facility was to avoid a series of individual offices and laboratories with hard walls and doors in favor of an open environment. The design gives identity to individual research groups but also provides great flexibility and stimulates cross-disciplinary interactions.

"We didn't want labs that were fixed and exactly the same size, so that researchers were either cramped for space or had too much space," he explains. The building that resulted has fluid and flexible space, allowing almost immediate reconfiguration of individual or group work areas with movable partitions and furniture as research needs change.

The facility's layout and accoutrements are both functional and aesthetically pleasing. On the first level, laboratories, workspaces and conference rooms surround an expanse of open, airy, atrium-like space. The cork flooring that covers much of the main level

Famous philosophers depicted in Raphael's *The School of Athens* include Plato (center, pointing upward), Aristotle, Pythagoras, Diogenes, Euclid and Ptolemy. A reproduction hangs in OU's Stephenson Research and Technology Center. INSET: The interior of the new research center fosters a similar atmosphere of academic collaboration.



The \$27 million facility at the corner of Jenkins and David L. Boren Boulevard boasts nearly 95,000 square feet of flexible laboratory space, offices and communal gathering areas, which encourage a creative exchange of ideas among the various disciplines housed there.

reduces what might otherwise be a cacophony of sounds bouncing off the glass, granite and wood surfaces. The furnishings—from contemporary hardwood chairs surrounding laminate-covered tables to upholstered armchairs on casters, complete with attached swivel desk surfaces, clustered around wireless-enabled tables—enhance an environment that is at the same time vibrant and tranquil.

Behind a floor-to-ceiling curved partial glass wall that faces the main entrance, OU's Supercomputing Center for Education and Research, known as OSCER, dominates both levels of the Stephenson Center's south end. OSCER is the only supercomputing center in the world that focuses on teaching supercomputing to scientists and engineers who do not have significant computing experience. It provides supercomputing resources, expertise and education to more than 250 faculty, students and staff throughout the University.

Just off the main entrance is a maple and glass staircase that leads to upper-level lab and workspaces, as well as central meeting areas. Two benches flank the mid-floor landing, enabling folks to stop, sit and take in the views. Balconies, complete with tables and chairs, pepper the perimeter of the upper level and provide even more space to gather or contemplate.

Flat-panel, plasma screens dot the building's interior landscape. One located just inside the main east-side entrance, along with four suspended side-to-side and back-to-back from cables in the domed, upper level ceiling keep the scientists tuned in to the outside world. The entrance screen also provides an electronic directory and way-finder for the Stephenson Center and the Research Campus. Additional screens are mounted to the



With movable partitions and furniture, Stephenson Center dwellers can create reconfigurable work, study or social spaces that fit their unique needs.



Students, faculty and staff at the Stephenson Center convene each weekday at 10 a.m. and 3 p.m. for complimentary coffee and tea at the center's snack bar, Café DNA.

walls of a large second-floor lab and in the multipurpose, glass-walled boardroom and seminar room on the lower level. Both of those popular meeting places are outfitted with large conference tables and comfortable, mobile chairs.

While the facility's hallmark reconfigurable space has more up-front costs than hard space, Williams says the University made a conscious decision to spend more money up front to save money—and headaches—later.

"The rule of thumb is that it costs more to buy configurable material than to construct sheetrock walls. But compare making an average of only one and a half changes to hard construction with the entire cost of the configurable material, and you've more than covered the difference," he explains. "Also, when we previously built labs, the benches were fixed in one location; to take them out or change them was a big expense. Here, we put in lab benches that are demountable so the space can be easily changed at a nominal cost and effort."

The recent addition of the 15-member Institute for Environmental Genomics team is early proof of those benefits. In short order, the Stephenson Center's operations staff made adjustments to the labs and office areas to accommodate the group.

Williams concedes, however, that some faculty who would ultimately move to Stephenson were not enthusiastic about the absence of "hard" space, at least in the beginning.

"When we first proposed this open building design, I'm sure everyone had in their minds the *Dilbert* [comic strip office] cubicle. Now, they are full advocates and very protective of their open, reconfigurable environment, which is marvelous."

Jonathan Wren, a research assistant professor in the Advanced Center for Genome Technology, moved into the Stephenson Center as soon as it opened. "This building is about being cross-disciplinary," says Wren from his second-floor, reconfigurable office. "It's very conducive to collaborative opportunities."

Williams gets similar feedback during his frequent strolls through the building. One day last fall, he encountered a doctoral candidate in the midst of writing his dissertation. "That's a time for privacy and focused thought, so I asked him how his space in Stephenson was working for him," Williams recalls. "I asked whether he prefers to lock himself in a room to work. He said, 'No, I love it. I can turn to my computer and write and then I can turn to see if [biochemistry professor and director of the Advanced Center for Genome Technology] Bruce Roe or one of his students is in the lab and go talk with them.'"

That is the kind of reaction—common among Stephenson Center dwellers—that reassures


Williams that the University hit a home run with the building's design. "A university's core identity is the open discourse of a community of scholars. That was the environment we wanted here. Some very exciting things happen when faculty members from different disciplines get together and come up with ideas for collaborative research," he says.

The seeds for some of those collaborations may very well come from what has become perhaps the first Stephenson Center tradition: free coffee and tea at 10 a.m. and 3 p.m. daily at the building's aptly named ground-floor snack bar, Café DNA.

The beverage breaks are Williams' way of reproducing his experience as a graduate student, when his entire department would take mid-morning and mid-afternoon breaks and head to the cafeteria. "I remember sitting down with faculty and having great conversations. That was part of my apprenticeship as a scholar," he recalls.

If the sheer numbers of faculty, students and staff hovering around the café at the appointed times is any indication, the experiment is a success. On any given day, representatives from just about every discipline housed in the building can be found seeking sustenance for both body and mind without taking one step outside.

"The stock and trade of a university is the creation and dissemination of knowledge and ideas," says Williams. "If your environment has only private space and no interaction space, you limit the ability to communicate ideas."

"This building is a living, learning experience. In many ways, it's a radical departure from how we have traditionally designed campus buildings, but I see it as a return to the original roots of what a university is all about." 

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