

JULY 2005 • VOL. 5, NO. 3

HEALTHCARE DESIGN

SHOWCASES

**Cardiac Care Garden Spot
Patient/Physician-Friendly Hospital**

**Plus...
Structural Engineering Update
Use—and Misuse—of Value Engineering**

MEDQUEST COMMUNICATIONS IN CONJUNCTION WITH


THE CENTER FOR
HEALTH DESIGN

SHOWCASE





physician convenience

Virginia Hospital Center Arlington, Virginia

PROJECT SUMMARY

Client: Virginia Hospital Center—John R. Garrett, MD, Chairman of the Board of Directors and Chief of Cardiovascular and Thoracic Surgery

Architecture/Interior Design: Gresham, Smith and Partners

Engineering (MEP, Civil, and Structural): Gresham, Smith and Partners

Landscape Architecture: Gresham, Smith and Partners

Master Planning: Gresham, Smith and Partners

Design Team: Kenneth Priest, Partner-in-Charge; Kevin Kim, Design Principal; Jay Henderlight, Project Manager; and David McMullin, Engineering Principal

General Contractor: Centex Construction

Equipment Planning: Centex Resource Group

Program Manager: Bovis Lend Lease

Artwork: American Art Resources

Photography: Rion Rizzo, Creative Sources Photography

Completion Date: November 2004

Total Building Area: 450,000 sq. ft. (addition); 430,000 (1,100-car subgrade parking garage)

Total Cost: \$120 million (\$93 million for building alone)

Cost/Sq. Ft.: \$207 (excluding garage and site)

When Virginia Hospital Center Chairman of the Board of Directors and Chief of Cardiovascular and Thoracic Surgery John Garrett, MD, envisioned a replacement cardiac care hospital in the already hospital-rich environs of Washington, D.C., he was looking to break the mold. The Washington-area “mold” was a large hospital of somewhat advanced years with, typically, a hodgepodge of additions of varying styles and levels of convenience that had been constructed over the years. “I had trained in Houston, where there are spacious and beautiful medical institutions. When I came here, I was impressed with how good the hospital was clinically but felt that the actual structure of the facility had to be updated. I wanted a place where it was easy for physicians to work, that offered privacy for our patients, and was spacious, with a modern appearance. In the final result, I think we achieved our goals.” Recently, Dr. Garrett joined lead designer Cori Morris of the Nashville-based firm Gresham, Smith and Partners, in offering a guided tour of the premises in an interview with *HEALTHCARE DESIGN* Editor Richard L. Peck.



Dr. Garrett: "This hospital was built in a neighborhood of family homes, and we wanted to be a good neighbor. We worked hard for an attractive, comfortable appearance."

Morris: "Because we were relocating the entrance from one end of the site to the other, this project needed help articulating its front door. We made the entrance and its nearby gardens curve in a more inviting manner and used a solid white stone instead of the old brick to mark its presence. The gardens serve as both an inviting element and a way to soften the lines of the new structure's walls."

Dr. Garrett: "I've always loved Reagan National Airport here in Washington. It's spacious, organized, modern and, to me, very future-oriented without appearing cold. I just like the feel of it. So I asked the architects to look it over and see what ideas came up. And I think you can see the influence throughout the public spaces of the hospital."

Morris: "The original hospital had virtually no public spaces—a couple of seating areas leading directly to corridors, essentially. Dr. Garrett wanted lots of natural light, and he wanted a 'wow' factor. He was also very impressed by the customer service aspect of the Ritz-Carlton hotels. The seating is arranged in comfortable groupings in the general waiting area, and hospital staff come and escort patients to where they need to be in the hospital."

"The staircase featured in the lobby is not only functional but also serves as a sculptural element. It is made of colored concrete wrapped in dark gray stone. The base is wrapped in lighter gray stone, with plantings. At the top is a balcony wrapped in black stone, with a light well underneath giving the appearance that the balcony is floating."

"The concierge desk is topped with blue LED lighting, but this lighting—like the lighting of the glass panels between elevator doors [below right]—can be changed via computer programming every half hour during an eight-hour shift. The light can also be set to conform with the color scheme of a particular disease-awareness promotion—for example, pink for breast cancer awareness, red for National Heart Week, and so forth."









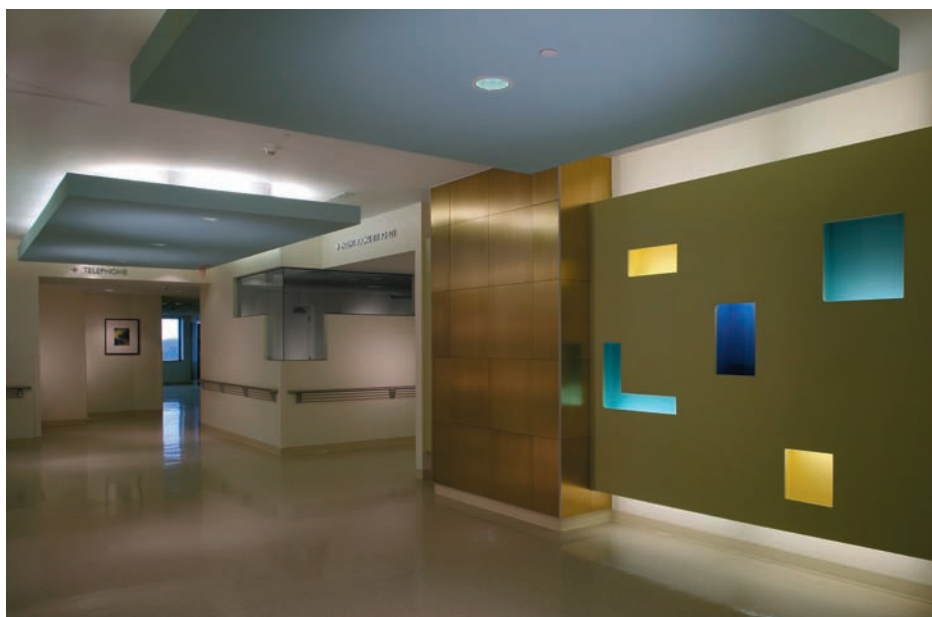
Dr. Garrett: “One of the things you notice in this area every day is the coffee aroma from the Starbucks kiosk in the lobby. You can see people relaxing and listening to our water wall. It feels good to be here.”

Morris: “The mall atrium is a space where people can relax and reflect. The water sheens over the glass with a gentle sound, and the natural light and artificial lighting installed underneath change as the day goes on. This atrium can also be used instead of the main lobby for community events, such as health fairs. Overhead is a bridge connecting clinical areas and the existing medical office building, which presents interesting overviews of the atrium.

“There are also direct connections from the atrium to semi-public waiting areas, such as the surgical waiting area [depicted]. This composes a softening transition between the public areas and the treatment areas. It helps orient people without their having to go deeply into the space to find their destinations. Other architectural wayfinding elements we used are typified by the yellow curved wall on the left, which encloses patient registration, and the Marlite wood-grained panels that frame the elevator lobbies on floors ground, 1, and 2.”

Morris: “We provided items intended to be memorable and different for each corridor, whether it is artwork on the walls—there are hundreds of pieces in this facility—or wall cut-ins that are painted and lit to provide a play on color, volume, and light. We decided against covering the cut-ins with colored glass in order to retain their three-dimensional look. The elevator lobbies also have glass walls that change color throughout the day, as with the concierge desk described earlier.

“Artwork really helps establish the tone for the vocabulary of the interior spaces. Several spaces have more of a gallery feel. The large piece in the main lobby was specially commissioned to reflect the use of color, texture, and volume that is evident throughout the architecture.”



SHOWCASE



Morris: "This is a 'full service' board room, equipped to serve as a command center for emergency services and disaster-relief planning. This facility took a lead role in responding to the 9/11 attack on the Pentagon, and all the electronics have been provided to enhance that role should the need ever occur."

Dr. Garrett: "Underneath the wood panels on one wall is all the telecommunications equipment we need to serve as a disaster-relief command center. We learned a great deal from 9/11. For example, when we designed the ER, we provided space and large showers for decontamination procedures, something we never would have thought of prior to that time."

Dr. Garrett: "We wanted the hospital to have a great feel that was spacious and open with no sense of congestion. In the patient rooms we add to this feeling with the large windows, some of which offer a view of the Washington, D.C., skyline. You often pass by a room and see a family member sitting on the daybed and taking in the view."

Morris: "We wanted to provide plenty of space and as much patient autonomy as possible. For example, patients who are capable can control the lighting and, using the translucent shade system,



the amount of natural light entering the room. The rooms offer daybeds for family comfort, as well as access to information via laptop connections that enable family members to maintain correspondence with work or keep in touch with others. Also in this zoned arrangement is staff work space, with a sink, soiled laundry collection, and nurse supply area. The objective was to offer all-private patient rooms and provide an ideal patient encounter that is comforting, care-focused, and convenient, while maintaining a healing environment. At the time of design, competitors in the area offered primarily semiprivate rooms; this approach was to be used as a market differentiator. Similar to hotel visitors, patients are assigned room numbers and can request 'room service' for meals from a prepared menu."

Dr. Garrett: "When I was in Texas, the operating room had a huge dome where maybe 12 people could observe a procedure. This was an expensive arrangement, and often the view wasn't very good. Here we have the 'latest and greatest' in audiovisual technology. We can offer much better views of the OR and broadcast to the auditorium, the conference rooms, across town, or wherever. I can observe all the ORs right from my office at any time."

Morris: "The operating rooms—a very large 850

square feet—are all equipped with teleconferencing equipment for teaching at the Georgetown University School of Medicine and for procedures that can be viewed from numerous locations. Because of the usefulness and flexibility of this technology, we have been able to do away with the standard operating room theater layout used for teaching purposes.

"Not only do the trauma room and emergency rooms make use of natural light, which has been found to reduce stress and improve care, but the corridors from the operating suite overlook the mall atrium and provide the staff with some exposure to daylight."

Dr. Garrett: "As a physician, I find Virginia Hospital Center to be a very easy place to work. The convenience of the medical office space within the new facility allows physicians to practice more efficiently. Not only do we have good proximity to patients and treatment areas, but all the clinical data—x-rays, lab tests, catheterization images—are digital. And with wireless technology, I can retrieve these from anywhere within the hospital. Also, with the press of a button on a small communication device no larger than a fountain pen that I wear around my neck, I can talk instantly with my team and my colleagues anyplace, anytime. From our



advanced technology to the new structure to our physician satisfaction to our patient care, I'm proud to say that we achieved what we wanted."

Morris: "The entire facility was planned and designed to enhance patient comfort and provider convenience. Emergency, radiology, and preadmission testing occupy the ground floor, and outpatient services, physical therapy, cardiac catheterization, the cath lab, and echocardiography the second. Surgery and the ICU share the third and fourth floors with physicians' offices, and the top four floors are dedicated to patient rooms. Patients have convenient access to the hospital, and physicians have convenient access to their patients. And all are functioning in a supportive environment." **HD**