Television producers often locate soap operas in hospitals for a reason: hospitals are where so many of life’s most significant moments occur. Indeed, if the Upper Valley were the setting for a soap opera, the drama would surely revolve around Dartmouth-Hitchcock Medical Center—and not just because it’s the only tertiary-care facility in the region, but because it’s central to the area’s economic and community life, too. Many of the dramas in my own life, for example, have played out within the walls of DHMC.

In a sense, I’ve been married to the place since 1997, as the spouse of a Dartmouth Medical School graduate who recently completed her anesthesiology residency at DHMC. In addition, both of our children were born at DHMC—in 2001 and 2006. And our elder child has cystic fibrosis, so we make more frequent visits to the place than even the average parents of youngsters do.

Accordingly, I bring to this assessment of a recent major expansion of DHMC the objective eye of an architecture critic, as well as the very subjective heart of a father who has bequeathed a chronic condition like cystic fibrosis to his beautiful little girl. I can hardly be dispassionate about the place that keeps her alive and thriving, waiting for a cure.

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the entrances on DHMC’s new eastern facade. This view shows the Cancer Center entrance and, to the right, the windows of the East Mall Dining Pavilion.
It was the late Lloyd Acton who 20 years ago conceived of and then resolutely defended the idea of creating an academic medical center around a three-story mall designed to function as a kind of public main street.

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I have too much insider information about how DHMC really works, as well as too many joyful—and tearful—memories associated with the building, to regard it purely as a mass of steel, drywall, and other materials arranged according to some architects’ professional judgment. During the many hours I’ve spent in its inpatient rooms, doctors’ offices, and waiting areas, I’ve come to appreciate the complicated but beneficent presence that the Medical Center has been ever since its opening in 1991. And I’ve come to understand what a good building can do for the people who need it.

Another Pulitzer-winner, the late Allan Temko of the *San Francisco Chronicle*, once praised the design of a health-care facility in his city as architecture that was both “unobtrusive to the casual visitor” and “part of the healing process.” For a cystic-fibrosis family, “the healing process” typically involves regular inpatient stays. So Temko, who died in January 2006, probably would not have minded a review written on a laptop in the hospital room of the author’s daughter while she received a course of intravenous antibiotics.

Indeed, from this perspective, the words Temko applied in San Francisco seem just right in assessing DHMC’s $220-million expansion, dubbed Project for Progress. The additions — accomplished between 2002 and 2006 — are unobtrusive but definitely part of the healing that happens here.

Of course nobody can spend $220 million to erect 467,000 square feet of new buildings, to renovate 281,000 square feet of existing space, and to create a parking garage with 540 spaces and do so invisibly. Project for Progress is only unobtrusive in comparison to the current fashion for eye-popping design. For example, Thom Mayne, whose 2005 Pritzker Prize makes him the architectural equivalent of a Nobel laureate, has proposed a new Alaska state capitol that resembles a giant egg.

No eggs were laid at DHMC, however. The
Boston firm that designed DHMC’s original Lebanon complex, Shepley Bulfinch Richardson & Abbott, was retained anew for Project for Progress. The firm is well stocked with designers who revere the late Lloyd Acton, the Shepley Bulfinch principal who, in the late 1980s, conceived of and then resolutely defended the idea of creating an academic medical center around a three-story mall designed to function as a kind of public main street.

To Acton, the mall and the humanizing effects he knew it would have on a medical facility were so important that he strategically sacrificed making DHMC look on the outside like the kind of iconic structure that wins Pritzkers. He understood that the original project’s budget—to say nothing of the prudence of the leaders of his client institution—could suffer only a finite amount of inventiveness and risk. It was hard enough to persuade them, for economic reasons, to forego the traditional Dartmouth brick for what are now the familiar DHMC metal panels, painted white with green accents.

Working nearly two decades later, Acton’s successors at Shepley Bulfinch, led by principal Carolyn Judge, confronted a tough choice. The space requirements driving Project for Progress—including a desperate need for more exam rooms—called for such a significant expansion that it was not possible to simply add more square footage to the space organized around the original mall. So they designed another mall, parallel to the first one.

The new East Mall—which extends from the newly expanded Norris Cotton Cancer Center and the new Doctors’ Office Building to a larger, reengineered Emergency Department and Same-Day Surgery Suite—is a highly effective artistic homage to its predecessor. To a lover of buildings, the East Mall is interesting for the same reason that jazz interests aficionados of music. The improvisation on the original theme, and the relationship of that improvisation to the original, make a walk around the complex an aesthetic adventure.

Giovanni Battista Piranesi (1720-1778) would have loved the original DHMC mall. It is to Piranesi’s etchings that we owe much of our culture’s reverence for ancient Rome. What he loved to create were romanticized images of grand interiors, with ornate classical detailing that made high drama out of contrasts between light and dark. Precisely the same effect is achieved by the west-facing wall of the original mall, with a textured surface that looks especially rich when sunshine filters through a band of skylights above. On the east-facing side of the original mall, three levels of walkways terrace backward, emphasizing the importance

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“We tried to situate the circulation on the exterior as much as possible—it really helps orient people,” explains architect Carolyn Judge. The people she has in mind are people under stress—ill patients or their family members.

of this wall as theater. Overall, the design beckons visitors to cast a vertical eye.

By contrast, the East Mall is all horizontal lines. Both malls fill essentially the same function, linking the various components of the facility in a way that is clear and logical. But where the walkways along the old mall are stepped, in the new mall the top two walkways float overhead. Beneath these floating walkways are recessed lines of light and curved oak panels. Compared to their older counterparts, the skylights on the East Mall are relatively modest; the daylight here comes principally from a glass “curtain wall” that forms the new eastern facade of the complex.

Given that the original mall formed the core of the DHMC campus, it is no coincidence that the new mall has migrated to the edge of the building. “We tried to situate the circulation on the exterior as much as possible—it really helps orient people,” explains Judge. The people she has in mind are people under stress: Patients who have just been diagnosed with cancer, perhaps. Or family members who have just witnessed the death of a loved one. Or parents who have just learned that their failure-to-thrive baby has cystic fibrosis.

“They’ve had a major trauma—they’re scared,” observes Judge. “Whatever we can do to orient them is helpful.”

Personally, I have found opportunities for seclusion to be just as valuable as the orientation aids. For those who are feeling traumatized, being able to walk between destinations and know there’s little chance of encountering friends or neighbors is important. In the original DHMC complex, “backstage” passageways parallel the mall and provide a way for patients, their families, and caregivers to move about out of the public eye.

Project for Progress interferes somewhat with this excellent organizing principle. The compromise was inevitable, though, since the only alternative would have been to extend the original mall and its parallel service corridors to a half-mile long. The limitations of the physical site, and of common sense, would have made this the wrong choice.
Yet even so, physicians and other staff can get from the inpatient towers on the north end of the complex to the outpatient clinics in the Doctors’ Office Building in total privacy by using Level 2—the “basement” level for most of the facility. And Judge points out that even the more convenient alternative—making the journey via Level 3, 4, or 5—requires only a brief crossing of the public space in the East Mall, where inconspicuous doors offer access to the back stairs and hallways of the outpatient facility.

Another unfortunate though unavoidable effect of the expansion is that the distances between the entrances and many patients’ destinations, and even from one place to another within the facility, have likewise expanded. The long hikes can be invigorating for healthy Generation X parents and lively preschoolers, but busy staffers now find they have to build indoor travel time into their workdays. And the challenge is even greater for elderly or ailing patients. To mitigate the difficulty, each entrance always has a gaggle of wheelchairs that any patient or visitor is welcome to use. Although this makes these otherwise grand gateways seem a bit cluttered, the alternative—replacing the horizontal journeys with vertical ones by turning DHMC into a skyscraper—would have been infinitely more unsightly.

Still another compromise required by the expansion—again the fault of neither the architects nor the clients—relates to Acton’s vision for the original Lebanon facility. With his design, Acton shifted the architectural paradigm for hospitals from the 19th-century conception of the hospital as either an almshouse or a hotel to the notion of the hospital as a village square—a model that the 1991 mall made very evident. Now, to look at the outpatient waiting areas in the new Doctors’ Office Building is to see that the architectural template for DHMC has shifted again—to an airline terminal.

Not that there’s anything wrong with that, to quote Jerry Seinfeld out of context. Some of the world’s best contemporary architecture is found at airports, as the terminals designed by Renzo Piano (in Osaka, Japan), César Pelli (in Washington, D.C.), and José Rafael Moneo (in Seville, Spain) clearly demonstrate. These structures are about efficiency as well as beauty. Such a philosophy is equally apt for health care in an era of cost containment and quality improvement. Getting you efficiently through Gate 7 at New Hampshire’s Manchester Airport so you can catch your flight to Baltimore is not terribly different from getting your daughter through Reception Area 6M and into her appointment with a pediatric pulmonologist.
The Rubin Building’s curtain wall proved the expansion would be no rote imitation of the existing facility. There was something deliciously defiant about placing such a startlingly new design element over the familiar main entrance.

Like Piano, Pelli, and Moneo, Judge and her colleagues understand how to keep people happy while moving them around efficiently. Judge points out that Shepley Bulfinch was careful to place oak portals at important crossroads in the outpatient building, to put windows at the ends of corridors (so visitors can tell from afar where the building ends), and to keep the stairways and elevators close to each other. The entire public outpatient space is also awash in natural light, thanks to the best new design feature to hit Hitchcock since the invention of the privacy curtain: the curtain wall.

To an architect, the phrase “curtain wall” relates to the fact that once steel replaced masonry as the supporting framework for big buildings, most exterior walls lost their structural significance and could be made of something as diaphanous as glass. This development is what enabled architect Gordon Bunshaft to dazzle the world with Lever House, the green glass skyscraper that first broke the gray stone monotony of Park Avenue in Manhattan.

That was 56 years ago. What took DHMC so long? Likely it was the fairly recent advent of glass with sufficient insulating capacity for the northern New England climate, plus the similarly recent notion that transparency is a virtue even at a facility where privacy is so crucial. Architecture is a powerful metaphor. Thus it should be no surprise that a medical center with lots of glass walls is so committed to transparency that it posts its patient outcomes data on its website.

Now that Project for Progress is complete, DHMC sports three curtain walls: along the East Mall; atop the Rubin Building, which houses the Norris Cotton Cancer Center; and at the entrance to the Doctors’ Office Building.

The glass facade of the East Mall is a big part of what makes this new part of the complex so distinctive. But it was the Rubin Building’s curtain wall, constructed when three new floors of cancer research labs opened in 2003, that first proved the expansion would be no rote imitation of the existing facility. There was something deliciously defiant about placing such a startlingly new design element...
in a spot that towers over the familiar main entrance to the original facility.

By night, this glass wall reveals a three-story atrium that exudes warm golden hues. By day, it is a communal space where the building’s researchers can mingle and, perhaps, spark some scientific genius through informal collaboration. Designing a workplace around the needs and interests of its occupants (instead of around the dictates of administrators or cost-cutters) is still considered radical and is thus more rare than it should be.

The curtain wall that forms the front entrance of the new Doctors’ Office Building is the most delicious thrill of all. Just as was the case with the famous glass house that Philip Johnson designed for himself in New Canaan, Conn.—itself a knockoff of a glass house that Ludwig Mies van der Rohe created in Illinois for Dr. Edith Farnsworth—the relative seclusion of the location adds to the intrigue by suggesting that not much separates the inside space from the natural world outside. The abundant sunlight and views of the hospital’s wooded setting soothe those sitting in the waiting areas that adjoin these windows. The top floor of the Doctors’ Office Building is devoted to pediatrics, where some of the glass panels are whimsically infused with translucent odds and ends to hold the attention of young patients; other child-oriented distractions abound, too. And there is enough running-around room to satisfy even a parent of a cystic-fibrosis child, fretting as we always are about what bugs a kid might catch from other patients.

In the remote recesses of the Doctors’ Office Building, far from the Medical Center’s main entrances (but not from the convenient doorway to the new attached parking garage) is the place’s best-kept secret. The glass entryway to the Doctors’ Office Building deserves credit as one of the region’s best architectural features.

If the architectural aphorism “God is in the details,” often attributed to van der Rohe, is correct, then there is something divine about the staircase in this entryway. The subtle curve of the railings constitutes a pleasantly mischievous rebellion against the strict 90- and 45-degree angles that otherwise predominate. They resonate with the curves in a colorful, three-story mobile by Seattle artist Koryn Ralstad that presides over the entrance.

Stairs are hugely important things, and not just for logistical reasons. The power to go from floor to floor using nothing more complicated than one’s own legs is the way architecture allows us to rebel against gravity and literally reach new heights. It is thus only logical that everyone who visits the original part of DHMC is drawn to the staircase at the
DHMC boasts a sylvan setting unusual if not unique for a major academic medical center (above and far right) and a relationship to nature reminiscent of a famous glass house in Illinois (near right).

The parking garage vindicates the view, held by both Judge and DHMC officials, that patients should come first. Doctors “would love to park right next to their offices and go right to their exam rooms,” Judge says. But at DHMC, patients do.

north end of the mall—a striking steel contraption that Judge calls the “get-to-know-you stairway” because of its notorious narrowness. It is impossible for two people to pass without at least one turning sideways. But despite that fact, the stairway is heavily used. The joke among the building’s designers, according to Judge, is that “people are using it wrong” because the designers had assumed that everyone would take the elevators to go up and would use the stairs only to descend.

By contrast, the main stairway in the Doctors’ Office Building is expansive and quietly elegant. It’s also a testament to Shepley Bulfinch’s negotiating talents. These architects know how to charm the cost-cutters. “Can’t you get rid of the curves?” was a question that Judge dreaded hearing from the construction manager, who was charged with worrying about the expense that details like curves add to the steel fabrication process. But she was ready with an answer. The curves could go, but only from the relatively inconspicuous railings on the stairway adjacent to the Cancer Center lobby. Elsewhere, they stayed.

Compromise was likewise a driving principle behind the 540-space parking garage adjacent to the new outpatient clinics (and reserved entirely for patients). Built of whitewashed concrete, the garage is as unremarkable as the Doctors’ Office Building is noteworthy. More of the garage’s nine levels were originally slated to be underground, but cost—and the topographic reality of a site that slopes upward by 60 feet from north to south—intervened. “We looked at dropping the grade,” explains Judge, “but people would have been driving into a hole.”

Still, the garage gave some relief to DHMC’s notorious parking shortage without consuming acres and acres of the site’s surrounding woodlands and wetlands. That speaks to Judge’s roots as a landscape architect. And it also vindicates the view, held by both Judge and DHMC officials, that Lloyd Acton was right—when it comes to hospital design, patients should come first. “Physicians would love to park right next to their offices and go right to their exam rooms,” Judge says. But at DHMC, it’s patients who get to do that.
Yet few patients know they prevailed in such behind-the-scenes struggles, and likewise few probably notice much of what is most important about Project for Progress. The Emergency Department went from occupying the hospital equivalent of a back porch, with waiting areas befitting a bus terminal, to a carefully planned space designed to speed the patient’s journey from ambulance bay to inpatient bed. And, not incidentally, to provide comfort and privacy to concerned family members.

Same-Day Surgery has also been expanded and reengineered to promote the efficient delivery of care. There are more operating rooms, and the new ones are specially designed to facilitate laparoscopic surgery and other such innovations.

The new outpatient exam rooms, where most care at DHMC is delivered, are different, too. The old rooms are 80 square feet; the new ones are a full 50% bigger at 120 square feet. No obvious visual cues signal this change—but to anyone who has had occasion to squeeze a feisty preschooler, her baby brother, her two anxious parents, a nurse, and a doctor into one of those rooms for an important confab, the adjustment is noticed and appreciated.

Judge is particularly proud of this achievement because those extra square feet, multiplied by the number of exam rooms, is a lot of precious space—and because her firm had sought, unsuccessfully, to build 100-square-foot rooms in the original facility. Prevailing in such struggles, through the exercise of architectural diplomacy, is one of Shepley Bulfinch’s signal capabilities.

One final detail deserves mention. It is a very modest improvement from the late-20th-century's DHMC-Lebanon to the early-21st-century's, but it is a source of joy to those who do notice it. For reasons that are self-evident only to engineers, the windows of the original DHMC complex are partially blocked at regular intervals by cross-braces. It turns out that these angled supports are there to protect the building from earthquake damage.

Judge points out that the advent of a technique known as “moment connections” rendered the cross-bracing unnecessary in the new parts of the complex. Moment connections protect a building from so-called “moment forces”—forces that can cause structural members to rotate. It is comforting to know that the Project for Progress buildings will endure, even if the earth literally shakes beneath them. And it is even more comforting to know that the people who use those buildings—people who often feel emotionally and spiritually shaken—can now view the serene and healing environs of DHMC without obstruction.

In the new and renovated parts of the facility, waiting areas (above) and exam rooms (left) are more spacious than they were in the original 1991 complex. The Emergency Department is also much larger.

The new Emergency Department is a carefully planned space designed to speed the patient’s journey from ambulance bay to inpatient bed. And, not incidentally, to provide comfort and privacy to concerned family members.