

The School of Medicine Building is designed to maximize students' medical education experience and encourage interaction with faculty, other students in the health sciences, and each other.



A home where **the future lies**

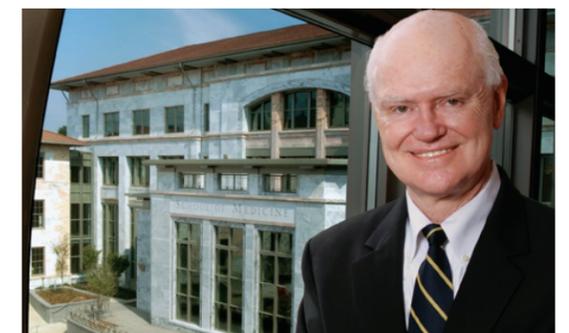
A new building and a new curriculum emerge to become a national model for training physicians

By SYLVIA WROBEL

The School of Medicine is finally home. It now resides in an elegant marble building—the first on campus to bear the school's actual name. As intended, it is filled with life, light, history, and the most high-tech amenities in medical education today.

In the eyes of Dean Thomas Lawley, the building is a beacon to students, with every space designed to maximize their medical school experience and encourage interaction with faculty, other students in the health sciences, and each other. The School of Medicine Building is a visible sign, he says, that Emory has never been more committed to medical education nor more determined to be a model for training physicians in 21st century medicine.

Medical school staff moved into the \$58.3 million, 162,000-square-foot building this summer. Class of 2011 students will be the first to know only this building as home and the first to complete their medical education within the new curriculum the building was designed to accommodate. The building also made possible an immediate 15% increase in class size to help alleviate the U.S. physician shortage projected by decade's end.



"THE STUDENTS LOVE IT!," SAYS DEAN THOMAS LAWLEY OF THE SCHOOL OF MEDICINE BUILDING.



1. THREE AUDITORIUMS, SEATING 160 STUDENTS EACH, FEATURE HIGH-DEFINITION SCREENS AND COMPUTER MONITORS AT EACH PODIUM. ONE AUDITORIUM HAS THEATER-STYLE LIGHTING TO ENHANCE PRESENTATIONS WITH PATIENTS AND MEDICAL SCENARIOS, MAKING THEM MORE REALISTIC. 2. THE SCHOOL OF MEDICINE BUILDING PROVIDES AMPLE SPACE FOR STUDENTS TO MINGLE AND STUDY, INCLUDING A GIANT SOFATORIUM.

“In the past, it was difficult to find enough small rooms the right size, and you had to bring your own equipment and hope it worked. But now it’s fantastic!” **Jane Gilmore**, assistant professor of neurology

The new curriculum fully integrates basic and clinical sciences. From their first week on campus, students acquire clinical experience and skills through interaction with real and simulated patients and medical scenarios. Half of the large, one-way lectures have been replaced by more interactive small-group sessions and greater emphasis on becoming lifelong learners. Mentoring is paramount, built around a “society” system that fosters greater interaction between students and faculty. Each student is assigned to one of four societies and one of 16 society advisers who guides them through all four years of medical school.

Faculty members are eager to take advantage of the new building. “We have been working on the new curriculum for three years,” says Bill Eley, who oversees medical education and student affairs. “Our first walks through the building inspired us to create classes that fit the new mode.”

There is no building like this anywhere, says Lawley. Darrell Kirch, president of the Association of

American Medical Colleges, agrees. A handful of medical schools with recently built facilities contain some of the same resources. That’s no surprise, since Emory leaders and architects with SLAM Collaborative toured all of these schools and borrowed from the best, as Emory hopes other schools will now do. But, as Kirch notes, few if any schools have combined so many innovative elements in one beautiful, cohesive, user-friendly space. And none have gone to more lengths to enhance the lives of students.

Nomads no more

The formal entrance of the building is through an atrium lined with warm walnut paneling and tall elegant windows that overlook a courtyard facing Emory Hospital. The “grand space” can accommodate an entire medical class at one time. Marble stairs lead to a dais where the dean and others can address students gathered on the main floor and on an open, second-floor walkway that links the newly renovated anatomy and physiology buildings.

Classrooms are equally ample and well appointed, sized to fit the new curriculum, with space-age audio-visual and information technology. Three auditoriums, each seating 160, feature high-definition screens that students can see in full daylight. Computer monitors at each podium record the material the lecturer is showing on the screen, including his or her responses to questions in class, so that students can review the material later. In one auditorium, theater-style lighting enhances

The students’ new home is replete with spaces for solo or group study, from cozy spots to spacious lounges, including one with a fireplace.





The way students are educated and treated will affect how they take care of patients and interact with other people throughout their lives.

Not just for medical students

The School of Medicine Building is going to make a difference for everyone in medicine. Gordon Churchward (below), course director for microbiology and immunology, recalls how the Rollins Research Center, which opened in 1990, inspired student-faculty interactions in the basic sciences. He believes the same thing will happen in the School of Medicine Building, a communal space where students from multiple disciplines, residents, fellows, alumni, and other practicing physicians will meet and interact. “If the building doesn’t do that,” says Dean Thomas Lawley, “we will have failed.”

Thanks to ample classrooms and simulation and anatomy facilities, the school expects to markedly expand opportunities for continuing medical education. The building will also be used by Emory clinicians to plan for emergencies for which providers must be ready at all times.



1. BILL ELEY IS ONE OF THE KEY ARCHITECTS OF THE NEW MEDICAL CURRICULUM, WHICH THE BUILDING WAS DESIGNED TO ACCOMMODATE. 2. SEMINAR AND SMALL-GROUP ROOMS COMBINE THE OLD (EXPOSED BRICK WALLS IN THE RENOVATED ANATOMY AND PHYSIOLOGY BUILDINGS) AND THE NEW (THE LATEST TECHNOLOGY) TO FACILITATE LEARNING FOR SMALL GROUPS OF STUDENTS AND INTERACTION BETWEEN STUDENTS AND FACULTY. 3. STUDENT AMENITIES INCLUDE A CAFÉ, COFFEE SHOP, KITCHEN SPACE WITH MICROWAVES AND REFRIGERATORS, AND PLENTY OF LOCKER SPACE.

presentations by patients, real or simulated, and dramatizations of medical scenarios.

Big is good but small is more exciting for faculty like Jane Gilmore, who runs the second-year pathophysiology neurology section. Four seminar rooms are designed for up to 40 students, with wireless networks linked to the hospital and other facilities. (These rooms also serve as meeting spaces for each of the class societies.) Eighteen small-group learning rooms, designed to facilitate both active learning and student/faculty/resident interaction, hold up to 20 students. “In the past,” Gilmore says, “it was difficult to find enough small rooms the right size, and you had to bring your own equipment and hope it worked. But now it’s fantastic!”

Two state-of-the-art computer/teaching labs are open 24/7, each with space for up to 75 students and a

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control room for IT support. Both labs are hard-wired, providing an extra layer of capacity in the first completely wireless building on campus.

For years, Emory medical students referred to themselves as “nomads,” always in search of a decent place to study, often settling for empty classrooms or local coffee shops. Their new home is replete with spaces for solo or group study, from cozy spots to spacious lounges, including one with a fireplace.



1. THE SCHOOL OF MEDICINE BUILDING IS THE FIRST WIRELESS FACILITY ON CAMPUS, ENHANCING STUDENTS' ABILITY TO TAKE NOTES AND STUDY VIA THEIR LAPTOPS. 2. A NUMBER OF PATIENT SIMULATORS ALLOWS STUDENTS AND PHYSICIANS TO ACQUIRE AND HONE THEIR MEDICAL SKILLS IN THE EMORY CENTER FOR EXPERIENTIAL LEARNING, DIRECTED BY DOUG ANDER (SECOND FROM LEFT).

“Please don’t call this part of the building the simulation center. It doesn’t do it justice.” **Doug Ander**, director of the Emory Center for Experiential Learning

Other spaces encourage interaction with faculty and each other in informal settings. “When students are as good as ours, they learn a lot from each other,” says Eley. The building has a café serving simple meals, a coffee shop, kitchen space with microwaves and two refrigerators, eating areas inside and out (one for students only), lots of comfortable chairs and couches (including a gigantic sofa), and chair-and-table groupings throughout.

A porch over the courtyard inevitably will attract sun worshippers every spring. And there are other amenities: showers, lockers, indoor parking for bikes, several LCD monitors that display an ever-changing array of announcements and campus activities, even a soundproof music practice room. The only thing missing, by design, is television.

While students come first, the building also includes headquarters for the dean, five executive associate deans, the chief information officer, and the offices of development and alumni relations, business and finance, and graduate medical education. Admissions space has more than doubled, a welcome change for prospective students who used to wait for interviews in a makeshift area in a hallway. The building and curricu-

lum are having a positive impact on 2012 applications.

More than simulation

“Please don’t call this part of the building the simulation center,” says director Doug Ander, in reference to the new Emory Center for Experiential Learning (ExCEL). “It doesn’t do it justice.” Indeed, the building has an unprecedented number of simulators that allows students and physicians to acquire and hone technical skills. Here they learn basic suturing, resuscitation, intubation, IV placement, and how to deliver a baby. Patient mannequins respond to various therapeutic measures and mimic physiologic and anatomic parameters, including heart, lungs, and airway.

But the secret of being a great doctor, says Ander, is the ability to use everything you have learned—and some things you haven’t—in real medical situations calling for speed, accuracy, teamwork, and sensitivity to patients and families. That is the overriding goal of ExCEL. Four simulation suites can be rearranged to create almost any hospital setting—one suite is fully equipped with operating room lights and medical gases—or almost any medical situation, even large-scale disasters.

When the door opens, students are immersed in realistic medical experiences. A patient may be resting in intensive care when his heart suddenly stops, bringing the code team racing to the bedside. Resuscitation techniques learned in a calm setting now become part of a complex choreography as doctors, nurses, and other clinical colleagues learn to work together.

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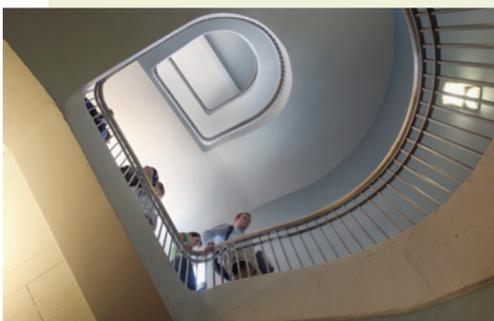


Link to the past

The School of Medicine Building flows seamlessly among three buildings. The airy “grand space” of the new central wing unites mirror wings that retain the structure and soul of the original anatomy and physiology buildings. Constructed soon after the medical school was formed at Emory in 1915, these structures have been renovated and renamed in honor of the late Charles and Peggy Evans.

Founding fathers would recognize much in the architectural details of the new facility. The original red tile roofs and pink marble walls melding with new gray marble. Tall, elegant arched windows. Warm interior walls of exposed brick. The winding marble stairway, where new medical students entered the anatomy building on their first day of class almost a century ago, serenaded by upperclassmen on the second floor—a tradition the school plans to resume.

Teaching has always been the jewel of the medical school—and the first mission to be set aside when clinical care or research demanded more time. No more, proclaims this building. If the ghosts of early faculty members are walking the halls of the School of Medicine Building today, they surely must feel welcome. The medical school, they would say, has come home.



Feedback is critical. Faculty watch from behind one-way mirrors, while video cameras record the action to show students how they performed.

Emphasis on learning in a simulated environment continues in the 16 clinical exam rooms, arranged in pods of four. Here students take histories and conduct physical examinations under the watchful eye of Alan Otsuki and other faculty standing behind observation windows. The “patients” in these OSCEs (observed standardized clinical examinations) are actors specially trained to represent realistic symptoms and responses in scripts illustrating dozens of medical conditions. Video cameras provide good feedback and so do the patient actors: “You had great eye contact,” one actor-patient told a student, “but too much cologne.”

Learning more from the human body

Anatomy faculty were probably the first to truly understand the impact of the new building. They never left. As the Anatomy and Physiology buildings were being hollowed out, faculty, students, and cadavers moved between dissection laboratories set up, torn down, and set up again. “Even these temporary laboratories were a big improvement,” says Kyle Petersen, the cell biology professor who directs the human anatomy course. The new dissection facilities, he says, are arguably the best anatomy space in any medical school.

Each of the 26 dissection tables is equipped with a computer for Internet access, magnetic resonance and other images, study guides, and lecture notes. Students note observations and questions on electronic whiteboards. Working in groups of six, first-year students use 22 tables. Allied health students use the other four tables, along with faculty and residents learning new techniques and continuing medical education participants. The expanded, improved body preparation area also provides space for the fresh tissue increasingly needed for faculty and continuing education studies.

Like the first patient encounter, the dissection

“The building is everything we wanted and needed for our students, and it’s going to make a huge difference for them, the faculty, and others. That’s a tremendous accomplishment.” **Jack Shulman**, senior adviser for curriculum development

laboratories mark a milestone in each student’s journey into medicine. With help from the university chaplain’s office, whose members spend time in the laboratory throughout the year, Emory’s anatomy program works to make the experience a meaningful one, from the time students “meet” their first cadaver to their final service of thanksgiving and gratitude. The beauty and design of the new building add to that respect, says Petersen.

A place for teaching

According to J. Willis Hurst, one of Emory’s legendary teachers (and whose grandson is a first-year medical student), a good building, by itself, does not make good doctors. Teaching does. That, says Lawley, is what the School of Medicine Building is all about. “The true strength of the medical school is its faculty. They wanted this building, and they helped design it. I’ve never seen them more energized.”

Perhaps no one wanted the building more than Jonas “Jack” Shulman, who directed medical education and student affairs for nearly two decades and remains the primary adviser on the curriculum and the building.

“The building is everything we wanted and needed for our students,” says Shulman, “and it’s going to make a huge difference for them, the faculty, and others. The way students are educated and treated will affect how they take care of patients and interact with other people throughout their lives. That’s a tremendous accomplishment.”