The Patient-Centered Care Learning Center (PCCLC) is home base for all University of Missouri medical students. The $42.5 million building advances the School of Medicine’s goal to train more doctors for Missouri and beyond, alleviating a critical national shortage of physicians.

As a welcoming, comfortable environment for medical students, the PCCLC offers six floors and 97,088 square feet of space focused on patient-based learning. Rather than sitting in lectures, medical students work through real clinical cases with an emphasis on clinical reasoning, self-directed and collaborative learning, and early clinical experiences. The curriculum prepares students to deliver patient-centered care.
HOW THE DESIGN WAS DEVELOPED

Students’ needs drove the design of the building. A concept emerged after design architects from BNIM of Kansas City and planning architects from Christner Inc. of St. Louis gathered input from students, faculty and staff, and shadowed the students to observe their daily activities.

In patient-based study, students gather at tables of eight, with each group working on different cases. Flexible classroom space with unfixed furniture would allow the students to see presentations from multiple angles and divide easily into discussion groups. The students also needed quiet surroundings, natural light, study areas, socializing space, storage, recharging areas for digital devices, showers and a place to change after anatomy class.

ARCHITECTURAL ELEMENTS TO NOTE

The PCCLC’s exterior blends materials from Mizzou’s architectural history. Its traditional brick and mortar gives a nod to the Red Campus, while the limestone-colored precast concrete is reminiscent of the limestone of the White Campus.

Inside, the structure is fused with light, thanks to floor-to-ceiling windows, skylights and a complex LED lighting system. With acoustical tiles that absorb sound, the surroundings encourage quiet. There isn’t a lecture hall in the building. Instead, flexible classrooms and study areas are equipped with movable tables and chairs that can be reconfigured easily. Bright furniture sparks the neutral, gray-toned spaces with color, and subtle threads of Mizzou’s traditional black and gold appear throughout the building, including in the terrazzo floors and wall tiles. Additional amenities: service kitchens, giant-screen TVs, digital access and water fountains with water bottle filling stations.

FAST FACTS

- The expansion allowed class sizes to increase from 96 to 128 students.
- Construction materials reflect the look of Mizzou’s historic campus.
- Exposed ductwork functions as art on all floors.
The design and decorative elements throughout the building reflect Missouri’s diversity, history and people, and function as reminders of the School of Medicine’s mission of service to the people. Visitors are encouraged to read the brief description near each piece of art.

The “river walls” south of the elevators on each floor are made of reclaimed Missouri wood, etched with carvings of the Missouri, Mississippi, Osage, Current and James Rivers – running through the building as they run through Missouri. The wood is salvaged from mid-Missouri barns, a wagon factory in Knox City, a shoe factory in Palmyra and a general store in Hannibal.

The steps of the second-floor main entry are crafted of re-purposed gray-vein Carthage limestone quarried in the late 1920s, installed in the Kansas City Power and Light Building in 1931 and reclaimed in 2014.

Showing the range of University of Missouri practicing physicians, large glass panels on the second floor feature a flat map of the world and, in multiple languages, give a summation of the School of Medicine mission statement: “For the People of Missouri and Beyond.”

On the fifth and sixth floors, artistic overlays on glass doors feature real Missourians who represent the diversity of patients served by Missouri-trained physicians. Resembling etched glass, the 32 images and their individual stories are the works of professional photojournalists of the Missouri Photo Workshop, a Missouri School of Journalism endeavor spanning six decades.
A Tour, Floor By Floor

First floor: Students enter the main anatomy lab with a swipe of their name badge, accessing work space at 36 stainless steel tables; for their comfort, a complex air filtration system refreshes the air 15 times an hour. Down the hallway, a six-table anatomy lab serves advanced students with surgery sub-specialties. Also on this level: a donor storage room, showers with changing areas, fire-pump room and housing for the hot-water heating system.

Second floor: An attractive colonnade connects the PCCLC to the medical annex. Benches line the hallways of the building connector, inviting visitors to sit and enjoy the surroundings. A cloud of white ceiling tiles near the entryway flows across the space, calling to mind Missouri’s rivers. Note the historic, gray-vein limestone steps at the main entrance. A classroom at the end of the north hallway shows how space can be reconfigured with movable tables and chairs. Also on this level: informal gathering spaces and an entryway to an outside porch.

Third floor: All personnel who have roles in medical education have offices here; adjustable-height work tables allow staff members to sit or stand while working. Also on this level: a waiting room, reception area, meeting rooms and a break room.

Fourth floor: Patient-centered care is the focus of this floor. The students receive their cases here and practice their interviewing and diagnostic skills in the 14 examination rooms. From a central control room, faculty mentors observe the students’ interactions with their role-playing patients. Also on this level: a large conference room wired for digital communication, a lounge for the role-playing patients, and three hospital-style rooms with high-tech equipment for diagnosis and treatment.

Fifth and Sixth floors: All first- and second-year medical students spend 10 to 12 hours a day on these two floors. In teams of eight, the students work in 16 case-study rooms per floor while enjoying stunning views of MU’s historic campus. Also on these floors: quiet lounge areas, including one with microwaves, refrigerators and, on test week, a bank of crock pots.

ENERGY EFFICIENT, COST EFFECTIVE

The PCCLC saves energy through an involved daylighting system connected to an LED lighting system. MU’s Power Plant generates the electricity and supplies steam for heating and chilled water for cooling. In a method of solar control, horizontal metal louvers – several stories tall and mounted on the south side of the building – block direct sun but retain the views; likewise, vertical fins on the east and west side let in a glow of light without direct glare.