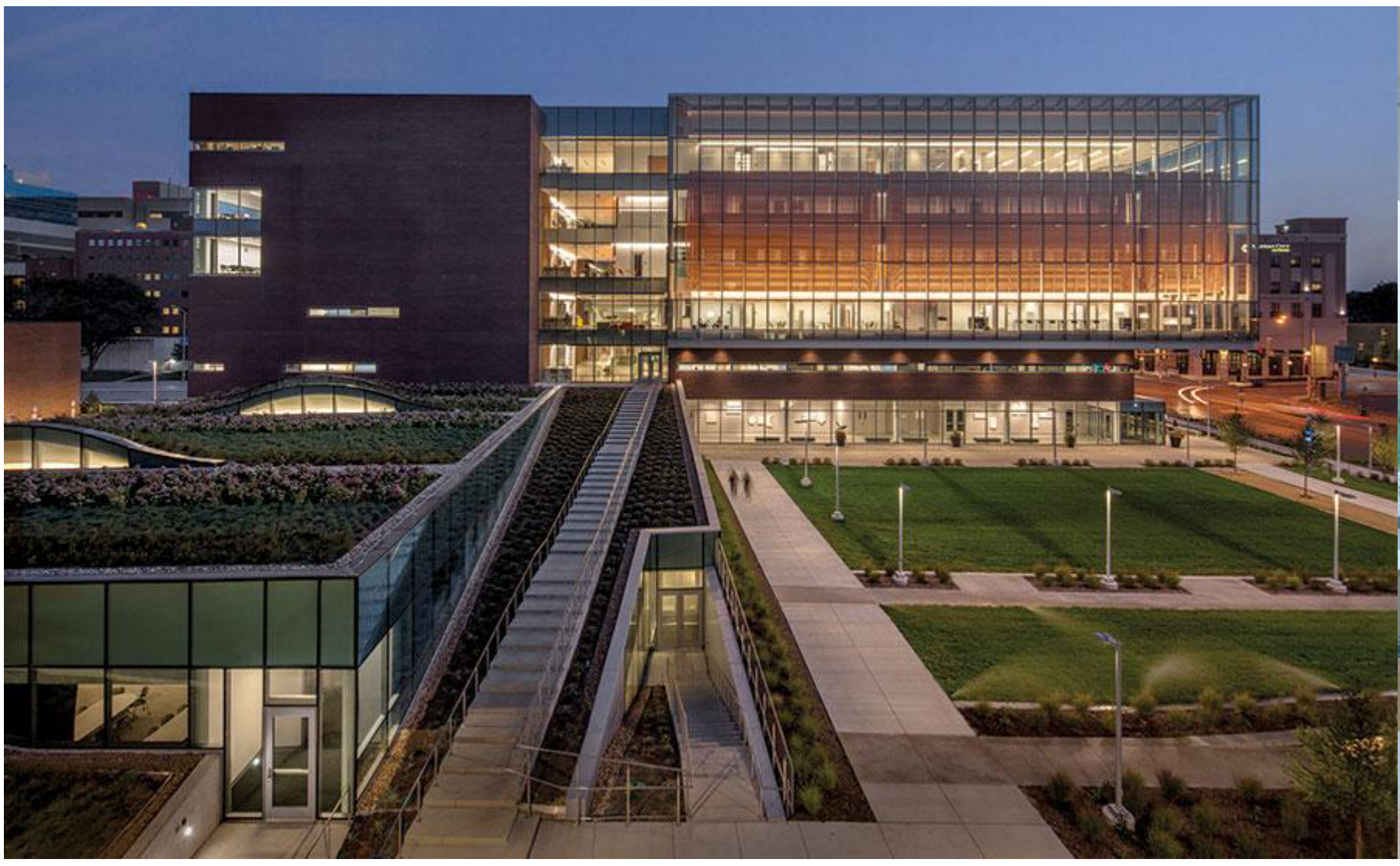
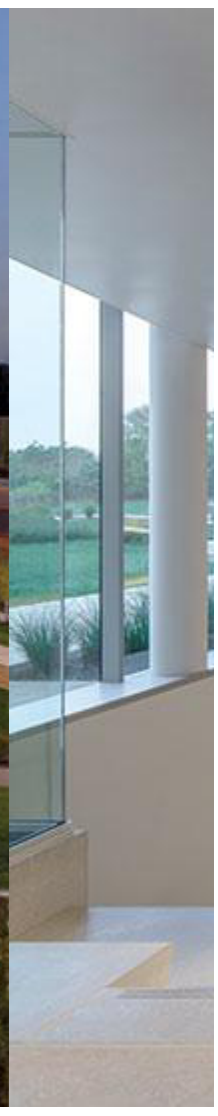
ARCHITECTURAL RECORD

KU Medical Center Health Education Building by CO Architects

Kansas City, Kansas



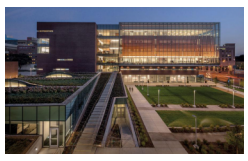
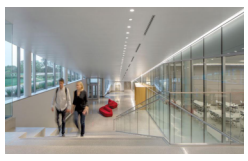
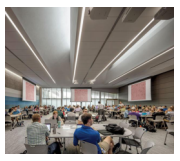


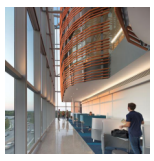
The HEB dramatizes the entry point into the KU Medical Center.

Photo © Bill Timmerman

Students and

Photo © Bill

PREV NEXT

July 9, 2018

Charles Linn, FAIA

Architects & Firms

CO Architects

While instruction at the Schools of Medicine, Nursing, and Health Professions at the University of Kansas (KU) long enjoyed a reputation of innovation and excellence, the aging facilities did not. Healthcare education has moved in directions that the designers of KU's six classroom and lab buildings could never have anticipated. With two structures built in the 1930s and a third almost a century old, the university knew that adapting the edifices to meet new standards of health-care education was not an option.

In 2014, the medical school's leadership seized upon the opportunity to design a new facility from the ground up. They chose Los Angeles–based CO Architects, along with executive architects Helix Architecture + Design, to create a center that would allow the school to incorporate simulations training, or "sims," into its curricula in a major way while making space for a 25 percent increase in enrollment. More broadly, the architects were to create a building that, located on a prominent corner at the gateway to the campus, would make Kansans proud of the outstanding KU Health System.

Additional Content:
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The result is the 172,000-square-foot, six-story Health Education Building (HEB), oriented on an east–west axis overlooking two major streets. At the front, the top four levels are expressed as a cantilevered volume enclosed within a double-walled glass facade. “KU wanted this building to be a front door, and, at night, a lantern,” says Jon Kanda, principal of CO Architects. “Transparency and the use of glass became our modus operandi to achieve those effects.” Behind, to the east, the volume contains small learning studios, the mechanical core, and circulation. Here the facades are clad in roman brick and are slashed by strip windows and a masonry screen. An expansive one-story learning-studio wing with a green roof is sunk into the site to the northeast of the glazed volume, and a new glass-enclosed bridge connects the new building to the north with the existing buildings of the medical campus to the south.

Behind the glass front facade is a gently curving, two-story horizontal screen composed of terra-cotta rods or “baguettes,” intended to evoke biology or anatomy. “People sometimes react to the wall as a transparent skin, seeing the baguettes as ribs, bones, lungs, or some sort of thoracic cavity,” says Helix principal Bryan Gross. “Our intent was not to make it too literal: everyone comes up with their own interpretation of its meaning.” John Gaunt, former dean of KU’s School of Architecture, Design & Planning, who acted as a design consultant for the university, describes the effect of the scheme this way: “The soaring space between the transparent enclosure and the functional ‘box’ within is flooded with light, creating architectural delight without compromising a sense of institutional purpose.”

Functionally, the terra-cotta screen modulates Kansas’s harsh climate and intense sun while providing privacy on the third and fourth floors, where students from all three schools work together on sims, practicing procedures in rooms resembling those they’ll someday use. The burgeoning professionals train with some 130 “standardized patients”—actors trained to exhibit specific symptoms according to what is being taught. For some sims, high-tech mannequins are wired to “speak” from control rooms where instructors observe the students working through one-way mirrors. The wide variety of spaces, including emergency rooms, an ICU, a fully equipped operating room, and a nurses’ station allow cross-disciplinary teams to work through myriad scenarios.

Dr. Robert Simari, executive vice chancellor of the KU Medical Center, notes that the schools’ curricula require medical, nursing, and allied health professionals to do sims together, so that they learn to focus on patient care and safety, engage in collaborative problem-solving, and develop decision-making skills. “We are one of the few programs that merged those silos into a hospital-based environment that’s part of the curriculum in all three schools,” he says.

The architects’ design responded to other new shifts in thinking about medical education as well. Dozens of study rooms for groups of four to 10 replace most single-student carrels, since group learning has been found to be more effective than solo study. Instead of stepped lecture halls, learning “studios” of various sizes allow instructors to stand in the midst of students, with presentations projected on each wall. At 11,000 square feet, the largest of these is located in a part of the building that could almost be considered a separate structure. Built at grade beneath the green roof, the column-free room can be divided in half or combined for events.

The wide, glass-enclosed pedestrian bridge directing foot traffic through the HEB spans 250 feet and has the feel of a village street. One side is used for circulation, and the other is divided into informal living room–like areas, some open and others enclosed. The passageway allows students and staff to have spontaneous meetings or a quiet coffee while escaping from the pressures of their work.

The university’s focus on providing students with the highest-caliber learning facilities ultimately benefits a group of people unlikely ever to set foot in the new HEB: the future patients of the KU-trained doctors, nurses, and other health professionals. “This building is really on the leading edge of medical education,” says Simari, “and, in the end, it all comes down to patient care.”

Credits

Design Architect:

CO Architects, 5055 Wilshire Blvd., 9th Floor, Los Angeles, CA 90036; 323.525.0500; F: 323.525.0955

www.coarchitects.com

Personnel in architect's firm who should receive special credit:

Scott Kelsey, FAIA, managing principal/principal-in-charge; Paul Zajfen, FAIA, RIBA, design principal; Jonathan Kanda, FAIA, LEED AP BD+C, principal for medical education and simulation; Tanner Clapham, AIA, associate/project architect; Chao Chen, AIA, architect; Michael Ly, designer

Architect of Record:

Helix Architecture + Design, 1629 Walnut St, Kansas City, MO 64108; 816.300.0300; www.helixkc.com

Personnel in architect's firm who should receive special credit:

Specifications

Exterior Cladding

Masonry:

Roman Maximus: Sioux City Brick

Metal panels:

Reynobond ACM: Arconic Architectural Products

Metal/glass curtain wall:

1600 Wall System 2, Structural Silicone Glazed (SSG): Kawneer

Curtain wall:

1600 Wall System 2, SSG: Kawneer

Other cladding unique to this project: (behind large glass wall, interior cladding)

Terrart Baguette: NBK Architectural Terracotta

Roofing

Built-up roofing:

Thermoplastic polyolefin (TPO): Carlisle Syntec Systems

Bryan Gross, AIA, principal-in-charge; Alissa Wehmueller, interior design principal; Mark Neibling, AIA, architect; Sam Loring, AIA, architect; Kate Phillips, interior designer.

Interior designer:

Helix Architecture + Design

Engineers:

MEP: Henderson Engineers

Structural: Bob D. Campbell and Company

Civil: SK Design Group, Inc.

Consultants:

Landscape: Land3 Studio

Lighting: Henderson Engineers

Acoustical: The Sextant Group, Inc.

Artists: Miki Baird, Marcie Miller Gross, Jesse Small, and Jeremy Rockwell

General contractor:

McCownGordon Construction

Photographer:

Bill Timmerman; 602 403 1441

Metal:

Double-Lock Zee-Lock Standing Seam Roof: Berridge Manufacturing Company

Other: (Green roof)

Green Roof System: Carlisle Coatings & Waterproofing

Glazing

Glass:

Solarban 72 Starphire ultraclear: PPG

Skylights:

Solarban 72 Starphire ultraclear: PPG

Doors

Entrances:

Kawneer

Metal doors:

Ceco Door

Wood doors:

VT Industries

Fire-control doors, security grilles:

Fire Control Doors: Won-Door

Overhead Coiling Doors: Overhead Door Co.

Special doors:

Vertical Operable Door: Skyfold

Hardware

Locksets:

Corbin Russwin

Closers:

Corbin Russwin

Exit devices:

Von Duprin

Pulls:

Rockwood Architectural Pulls

Interior Finishes

Acoustical ceilings:

Ultima, Optima, MetalWorks: Armstrong

Suspension grid:

Prelude: Armstrong

Demountable partitions:

Privacy System: Steelcase

Cabinetwork and custom woodwork:

C&S Woodshop

Paints and stains:

Sherwin-Williams

Plastic laminate:

Formica

Solid surfacing:

Caesarstone; DuPont Corian; Wilsonart

Special surfacing:

Back-Painted Glass: Walker Textures

Polished Plaster: Armourcoat

Acoustic Panels: Novawall

Panel Fabric: Xorel: Carnegie Fabrics

Floor and wall tile:

Floor Tile: Floor Gres; Mosa

Wall Tile: Daltile; Atlas Concorde

Resilient flooring:

Rubber Sheet: Nora

Resilient Base: Johnsonite

Carpet:

Interface

Raised flooring:

Intertek

Special interior finishes unique to this project:

Terrart Baguette: NBK Architectural Terracotta (at double façade)

Wall Protection: Acrovyn: Construction Specialties

Roller Shades: MechoSystems

Furnishings

Office furniture:

Steelcase

Reception furniture:

Lounge Seating: Coalesse

Lounge Seating: Bernhardt Furniture Company

Lounge Seating: Andreu World

Lounge Seating and Small Tables: Hightower

Lounge Seating: Loewenstein

Café and Lounge Seating: Herman Miller

Reception Desk: Tuohy

Chairs:

Classroom Chairs: Herman Miller

Guest Chairs: SitOnIt

Tables:

Classroom Tables: Versteel

Meeting: Steelcase

Study Tables: Herman Miller

Upholstery:

Maharam

Designtex

Camira Fabrics

Bernhardt Textiles

Other furniture:

Marker Boards: Clarus, Steelcase

Interior Planters: Magnuson Group

Waste/Recycling Receptacles: Steelcase

Power Hubs: Steelcase

Lighting

Interior ambient lighting:

2x2 and 2x4: Axis Lighting

2x4: Lithonia Lighting

Cove/Indirect: Ecosense Lighting

Indirect: A Light

Linears:

Axis Lighting

Linears: Mark Architectural Lighting

Linears: Prudential Lighting

Simulation Rooms: Healthcare Lighting

Simulation Rooms: Columbia Lighting

Track: Juno Lighting

Wall washing/grazing: Ecosense Lighting

Wall washing/grazing: Prudential Lighting

Wall grazing: Xenon Architectural Lighting

Downlights:

ALW

Kurt Versen

Lithonia Gotham

Tasklighting:

Exam Light: Skytron

Surgical Light: Stryker

Undercabinet: Healthcare Lighting

Exterior:

Accent lights: Qtran

Site/Area Pole Lights: Cree

Downlights: Lithonia Gotham

Handrail Lighting: Livers Bronze

Dimming system or other lighting controls:

Acuity Controls

Conveyance

Elevators:

Otis Elevator Company

Recent Articles By Charles Linn,

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Charles Linn is a Kansas City–based writer and architect and a former deputy editor of *Architectural Record*.