

# **HEALTH EDUCATION**

SIMULATION SPACE | 21ST CENTURY CLASSROOMS | FLEXIBLE LEARNING SPACE | HEALTH INFORMATICS INTERDISCIPLINARY COLLABORATIVE SPACE | CLINICAL SKILLS LEARNING | COMMUNITY INTERACTION | SUSTAINABLE







**\$2.3B** total value of **health education projects** built by Kitchell



800+ employees nationally



### BUILDING SPACES THAT ADVANCE THE HEALTH PROFESSIONS

Kitchell was established in 1950 by Sam Kitchell. Our roots are in general contracting and construction management with a focus on delivering technically challenging projects. As the construction industry grew, Sam recognized the need for improved, flexible methods for meeting construction challenges. We have continued to reimagine the way buildings are delivered since.

Our innovative prefabrication solutions are a result of needing to deliver time sensitive projects in a tight labor market. Our award winning quality assurance team was assembled due to complexities with advanced medical equipment and imaging rooms. And our industry-leading virtual construction capabilities with fully integrated building information models have taken project collaboration to new levels.

Providing innovative solutions to technical challenges is in our DNA. Kitchell's industry leadership is reflected in the strong, decades-long partnerships we have nurtured with core clients who we serve.

### Representative Clients

ARIZONA STATE UNIVERSITY AUSTIN COMMUNITY COLLEGE CALIFORNIA POLYTECHNIC STATE UNIVERSITY NORTHERN ARIZONA UNIVERSITY SAM HOUSTON STATE UNIVERSITY SAN DIEGO STATE UNIVERSITY SOUTH UNIVERSITY TEXAS STATE UNIVERSITY UNIVERSITY OF ARIZONA UNIVERSITY OF CALIFORNIA UNIVERSITY OF HOUSTON UNIVERSITY OF NEVADA UNIVERSITY OF NEW MEXICO UNIVERSITY OF TEXAS

### SAM HOUSTIN STATE UNIVERSITY Health Professions Building

This new four-story, 81,500 SF Health Professions building will be on the Conroe Campus. The building supports Dietetics, Athletic Training, Physical Therapy, and Physician Assistant programs and features learning commons, skills areas, active learning classrooms, a library, and a Student Services suite.

HEALTH PROFESSIONS BUILDING



### THE UNIVERSITY OF ARIZONA Health Sciences Innovation Building

#### AWARD WINNING

2020 NATIONAL EXCELLENCE IN CONSTRUCTION EAGLE AWARD, MEGA PROJECT, ABC 2020 BEST OF THE BEST, HIGHER EDUCATION, ENR 2020 HIGHER EDUCATION BEST PROJECT, ENR SOUTHWEST 2020 AMERICAN ARCHITECTURE AWARD, THE CHICAGO ATHENAEUM: MUSEUM OF ARCHITECTURE AND DESIGN 2021 RED AWARD, HIGHER EDUCATION PROJECT OF THE YEAR, AZRE The 226,000 SF Health Sciences Innovation Building (HSIB) serves as a cutting-edge platform to build and foster collaboration among interdisciplinary teams of health professionals, students, and faculty in medicine, nursing, pharmacy, and public health.

HSIB provides an environment for integrated education and collaboration to prepare graduates for high-demand clinical areas, such as behavioral sciences, physical therapy and health informatics. The building offers preeminent spaces for research, simulation practice, clinical skills learning, and community interaction.

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### THE FORUM + COMMUNITY OUTREACH

This multi-functional space was created to draw community members onto campus so it was important for The Forum to be open.

The Forum includes a four-story glass-enclosed volume at the ground floor, set back behind a portico and a series of V-shaped concrete columns. This expansive space opens up to the outdoors and offers a flexible program that accommodates student gatherings and community events from **50 - 1,000 guests** including a presentation stage, tiered seating and dual-sided LED video wall that retracts from the ceiling. The ground floor also includes a bookstore and café.





The University of Arizona **Health Sciences Innovation Building** 

### Forward-Thinking: Building Unique + Adaptable **Space for Future Flexibility**

The main goal was to create an environment that could bring several disciplines together. Each floor of the new building is flexible with the ability to adapt over time without costly renovation. For example, on the ninth floor, occupants can see from North to South and East to West uninterrupted by structural supports. This gives the Owner the ability in the future, when things change, to make modifications and adapt to whatever comes next for their space as disciplines learn together. Floors three - six including student interactive spaces, student lounges, terraces and study areas for disciplines to interact outside of the classroom.





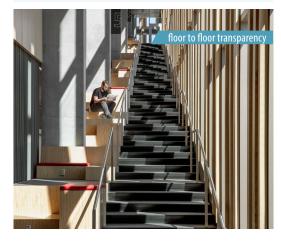
## Fostering interdisciplinary collaboration at HSIB





### **Additional Features Include:**

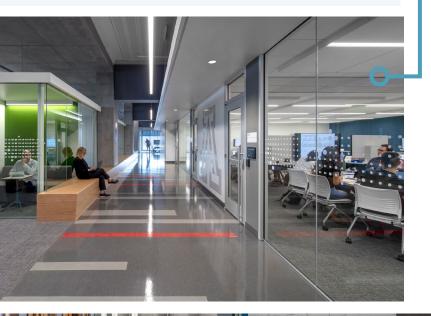
- Dedicated Physical Therapy training space in the basement level
- Breakout rooms for small groups, large classrooms with moveable furniture and white boards, and makerspace with equipment including 3D printers.
- A black-box theater that enables immersive, augmented-reality simulation environments
- State-of-the-art technology including a unique, highly sophisticated AV system that enables the entire 9-story tower to function as a single system
- Filming studio and a centralized broadcast booth for recording and streaming content produced in-house
- LEED Golf Certification



### FLIPPED LEARNING + STUDENT SUPPORT SPACES

Today, more lectures are being recorded and posted online, and university researchers have found that many students skip these classes and review the lecture content at their own pace.

HSIB features 46 classrooms, including "flipped" classrooms, which take advantage of this tendency by providing students with an interactive setting to apply concepts they learned more effectively while engaging and collaborating with peers in smaller discussion groups. Classrooms accommodate up to 150 students for interactive learning and can combine or divide via automated partitions. Also, classrooms have systems that support Zoom conferencing and Panopto recording.



### THE FACULTY COMMONS + ADVISORY

On the second floor, the Faculty Commons is a casual environment for faculty members to enjoy face-to-face time with colleagues. Next door to the Commons is the Advisory, where faculty members can meet with representatives from Tech Launch Arizona, the BIO5 Institute, the Eller College of Management, the James E. Rogers College of Law, the College of Engineering and others — a one-stop-shop for multiple departments on campus. Overall, the building includes administrative work space, conference rooms, 70 meeting rooms, debriefing rooms and a huddle room.







### "We can make bleeding tissues, airways, lungs — whatever we want"

**Allan Hamilton ASTEC Executive Director, Regents Professor of Surgery** 

### HSIB 7th Floor: **Artificial Tissue Lab & Advanced Simulation**

The 7th floor of the University of Arizona Health Sciences Innovation Building houses the Arizona Simulation Technology and Education Center (ASTEC). This center is focused on interdisciplinary research, training, and education for the health programs. With high-fidelity manikins, virtual and augmented reality devices, and game-based learning systems; ASTEC is a state-of-the art academic research space.

ASTEC has its own **3D printing and** artificial tissue laboratory, a resource unique to health care simulation centers that grew out of a collaboration between the colleges of engineering and medicine.

ASTEC also features the **SimDeck**, a two-story soundstage and training environment with multiple reconfigurable rooms. Learners can be fully immersed in simulated events, such as a complicated birth scenario, a forest fire or mass casualty event, or basic airway, suturing and laparoscopic surgery training. From an adjacent control room, participants are observed on monitors, and they can review what happened in nearby debriefing rooms.













## State-of-the-art med simulation + research spaces

#### MAYO CLINIC SCHOOL OF MEDICINE

The new facility features innovative technology in a new gross anatomy laboratory, **six simulation exam rooms**, five classrooms, a main study space, and student locker rooms. The medical school also features cadaver laboratories set up with touch-screen technology.

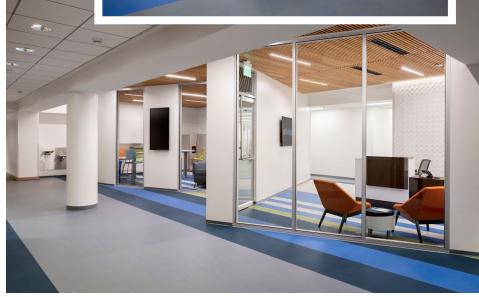
Mayo Medical School includes a new course of study, the Science of Health Care Delivery, which is embedded throughout all four years of study and includes instruction in healthcare economics and biomedical informatics.

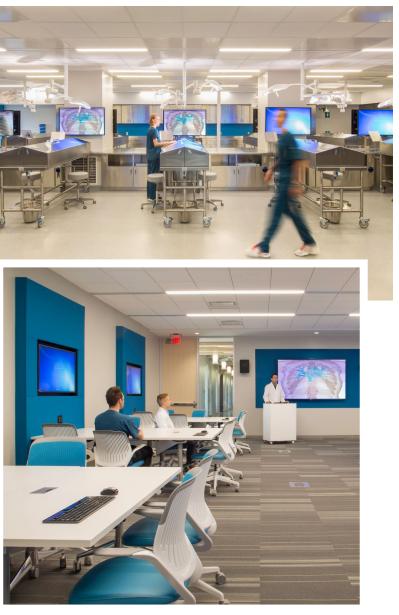


#### UNIVERSITY OF CALIFORNIA RIVERSIDE CLINICAL SKILLS & SIMULATION SUITE

The project involved renovating and converting 10,000 SF of the basement level of the School of Medicine's Education Building, previously the Orbach Library, into a **Clinical Skills & Simulation Suite** — nearly ten times the size of the old space.

The suite includes (16) simulated exam rooms, (1) simulated ER, (1) simulated ICU, and (1) simulated OBGYN along with 2,000 SF of administrative offices, conference and training rooms, a reception, and a lobby. The new space is now the **largest clinical simulation space in the UC system** and dramatically improves the quality of education campus for both students and faculty.







### THE UNIVERSITY OF ARIZONA CENTER FOR SLEEP & CIRCADIAN STUDIES

The new state-of-the art sleep center includes 6 sleep suites, 10 test rooms including 2 exam rooms, laboratory space, administrative space, and community interfaces. The sleep suites are intended for overnight and long term sleep studies, without any time reference cues as to day or night. One control room is provided to monitor all bedrooms and suites in real-time utilizing NATUS technology. **Researchers will be able to study sleep and circadian rhythms while meticulously controlling a multitude of factors including temperature, noise levels, respired gases and the intensity, duration and color of light.** 





### VALLEYWISE HEALTH VIRGINIA G. PIPER PAVILION

The Virginia G. Piper Charitable Trust Pavilion serves as a new learning and teaching hub at Valleywise Health's Phoenix campus. Clinical education will be housed on three dedicated floors of the six-story 106,088 square-foot facility in addition to administrative services and community meeting space.

The building includes **medical** simulation spaces that match the adjacent hospital. The building also houses materials management, physician's offices, and an auditorium that will be used in partnership with Creighton University's School of Medicine.





## Leading Academic Medical Centers

Banner University Medical Center Tucson Baylor, Scott & White Medical Center College Station University of New Mexico Sandoval Medical Center St. Joseph's Hospital & Medical Center Phoenix Children's Hospital UC Davis Medical Center UC Irvine Medical Center Valleywise Health Medical Center



### UC SAN DIEGO Jacobs Medical Center

As a translational academic medical center in the truest sense —the building facilitates the convergence of research, education, and clinical care and helps position UC San Diego as a leading medical research institution.

The 10-story, 509,500-square-foot facility is built next to UCSD's existing Thornton Hospital and connects on multiple floors. It includes a bone marrow transplant unit, 14 operating rooms, labor and delivery unit, NICU and birthing center, and a medical education center with three theaters.



# **CHALLENGE US**

"When you have a problem, some people tell you what they can't do. At Kitchell, we roll up our sleeves and get to work. We look for those building projects that test our creativity and problem solving abilities. If you face a building challenge, challenge Kitchell. We're ready."

— Sam Kitchell, Founder



TOGETHER, BUILDING VALUE EVERY DAY.

