Colorado State University's College of Engineering, like many public land-grant institutions, has organically grown in a series of post-war era facilities in the heart of campus. The net result is a bees-hive of underwhelming spaces which do not foster the kind of educational environment needed to support the 21st Century Engineering student.

Starting in 2009, the design team helped develop a phased program plan that would allow the College to align its vision with their financial capacity. As private support would largely fund the project, the program plan, and ultimately the building design, was imagined as a ‘loaf of bread’ which could be sliced as necessary to meet the continually evolving project budget. This approach allowed design and fundraising to run parallel tracks.

For the Suzanne and Walter Scott, Jr. Bioengineering Building itself, CSU imagined a research environment where faculty and students of biomedical engineering, bioanalytic devices, synthetic biology, health and energy, and environmental engineering could work across disciplines to solve the world’s critical problems related to health, the environment and energy.

This new bioengineering building provides more than 43,000 sq. ft. of multi-disciplinary laboratories and research offices; 16,000 sq. ft. of classroom space and collaborative work areas; 10,000 sq. ft. of administration space; and a 24-hour study space. Contextually grounded in the CSU campus language, the design features stacked Ashler Sandstone & Red Sandstone panels, signature materials of the surrounding region.

The building’s design fosters innovation and collaboration through a straightforward plan establishing a lab zone and a research office zone. Each is connected by an atrium featuring seating for collaborative meetings. A glass wall along the lab zone allows visitors to witness the research activities inside, and provides a sense of transparency and safety for students.
and researchers working late into the night. Easily reconfigured casework addresses the need for flexibility in research environment.

The design team also worked closely with researchers to create shared equipment rooms that reduce duplication of expensive equipment while still separating some of the more environmentally sensitive processes.

LEED Gold certified, the building’s tight envelope, position on site and naturally ventilated three-story atrium takes advantage of the Colorado air as it flows west to east. A highly efficient curtain wall system, along with interior and exterior sunshades on the building’s south facade, allows for ample daylighting, and all labs and offices have light sensors to decrease electrical usage. Finally, a rooftop data center helps preheat air before it enters the building, further reducing energy costs.