

BIOMEDICAL SCIENCES RESEARCH FACILITY

SANTA CRUZ, CALIFORNIA

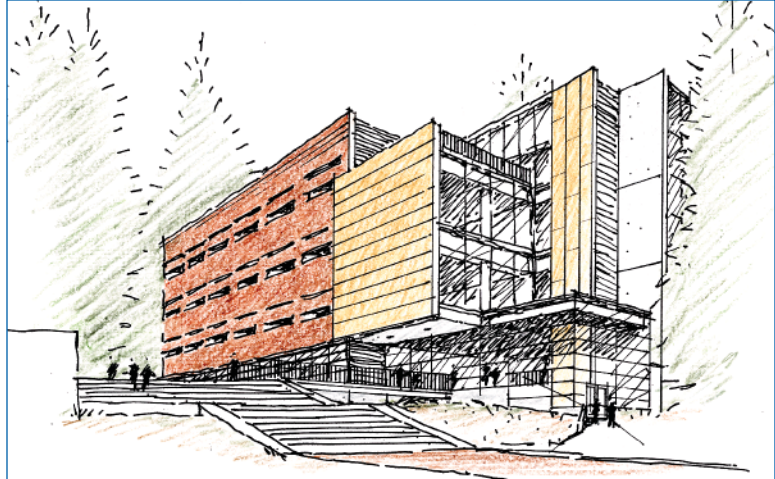
■ Mechanical ■ Electrical ■ Energy Analysis ■ Commissioning

Active chilled beams in laboratories

Stem Cell Research Center

Target to achieve 30% to 50% lower energy use than a typical 2005 Title 24 compliant lab.

Designed to achieve LEED Certification



Mechanical, electrical, and low-voltage design for new, \$72 million 100,000 sf, 4-story interdisciplinary research laboratory building with a basement vivarium. The primary purpose of the laboratory building is to provide open and flexible laboratory spaces for researchers in molecular and cell biology, development biology, chemistry and biochemistry, environmental toxicology, and biomolecular engineering. The 20,000 sf of wet laboratory space is complemented by 20,000 sf of laboratory support space. Offices and administrative areas are included. The entire 4th floor will be devoted to stem cell research. Our mechanical and electrical designs emphasize on sustainability and energy-efficiency. Sustainable Design Features: daylighting, lighting controls, active chilled beams in the labs, reduced air change rates, and low pressure drop design of air handling systems. Steam required for vivarium and lab equipment is generated by a thermal fluid heating system, allowing for high pressure steam from unattended boilers. Design began in 2006.



OWNER

University of California, Santa Cruz

SCOPE

100,000 SF, 4 stories

SERVICES

MEP, Energy Analysis, Telecom and Commissioning

COST

\$72 million

