

UBC

UBC Biological Sciences Building Renew

Address ([Map](#)): 6270 University Blvd, Vancouver, British Columbia V6T1Z4 Canada
 Sector: Educational Delivery Type: Design-Bid-Build
 MCW Office: Vancouver Status: Complete
 Awards: UBC, Biological Sciences Building, Vancouver BC Sub Categories: College & University

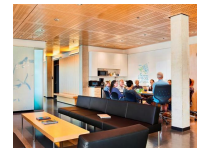


Mechanical:
MCW Consultants

Electrical:
MCW Consultants



Architect:
Acton Ostry Architects



Contractor:
Scott Construction Group



Project Description

This project renovated the 50-year-old, four-storey South and West Wings, providing state-of-the-art lab systems, aquaria, informal research spaces, classrooms, seminar rooms, and gathering spaces for the botany and zoology departments. The energy-efficient systems will save UBC approximately \$1 million in utility costs every five years, and drastically reduce its environmental footprint. Construction was completed ahead of schedule and under budget.

Mechanical Systems Description:

MCW designed the centralized water-to-water heat pumps, providing simultaneous heating and cooling and transferring heat from areas requiring cooling to areas requiring heating. Five main air handling units provide temperature control and ventilation needs specific to space requirements. The supply and relief air ductwork distribution systems are demand-controlled, so energy is only expended when necessary.

Electrical Systems Description:

MCW designed the new unit substation, replacing the existing centre block high voltage vault. The substation has additional capacity to re-feed current loads, freeing adequate capacity to accommodate the new aquatics laboratory load.