

MEMORIAL UNIVERSITY OF NEWFOUNDLAND –
ANIMAL RESOURCE CENTRE

Architecture driven by architecture

Science + Technology



LOCATION

St. John's , NL

CLIENT

Memorial University of Newfoundland

COMPLETION

2022

COLLABORATORS

John Hearn Architects

DBA Consulting Engineers

CORE Engineering

Pageau Morel Associates

DIALOG SERVICES

Architecture

Laboratory Design

The Animal Resource Centre (ARC) supports research and teaching at Memorial University's Faculty of Science and Faculty of Medicine, including groundbreaking investigations into the role of genetics in human health. Our utility distribution strategy located the large, heavy mechanical equipment within an adjoining substructure in a sidehouse configuration, feeding the laboratory and vivarium spaces on each floor through horizontal service runs. Compared to typical roof- or basement-level equipment locations with vertical service shafts, the sidehouse configuration delivers important advantages: the open floorplates improve space efficiency and increase flexibility; the separate utility structure allows off-site prefabrication and reduces construction time; and the structural isolation minimizes the transmission of noise and vibration to the animal housing areas. Air handling units and other mechanical equipment can be readily accessed from the outside, easing their replacement and reconfiguration; inside, building systems can be serviced without entering controlled areas. The multi-species animal holding areas house mice, rats, woodchucks, and Yucatan minipigs. Surgical suites, procedure rooms, an imaging suite, a necropsy suite, a diagnostic laboratory and other specialized facilities are planned to optimize inter- and intra-departmental adjacencies and maintain CL2 containment requirements.