

Case Study

Research & Development



Microbial Fermentation and Sterilisation Lab Fonterra

Completion Date: 2018

Location: Palmerston North

Services: Specialty Laboratory Architects



The Microbial Fermentation and Sterilisation Lab (otherwise known as the Media Lab) provides a support function to scientific research for a number of business research units at Fonterra's Research & Development Centre.

The Media Lab cleans and sterilises glassware and biological waste matter, and prepares media (base preparations) for use in scientific research. The existing Media Lab was cramped and had a poor workflow, and there was limited space for storing clean consumables. Key pieces of equipment had reached the end of their serviceable lives and needed to be replaced.

A Master Planning exercise was undertaken to determine how the research units and the Media Lab could fit within the existing building footprint. The Master Planning identified that an additional floor plate area was required and therefore an addition was added to the exterior of the building to house part of the new Media Lab.

The construction of the project was staged to allow a laboratory adjacent to the Media Lab to be completed first.



This enabled the old Media Lab to continue operating, and ensured no interruption to the business, while the exterior shell was constructed and the interior of the new Media Lab was fitted out.

The new Media Lab is a single open space with three distinct areas for dirty equipment washing, sterilisation and media preparation. Dirty and clean areas are separated by controlled air flow.

The layout of the functions within the lab allow for an efficient workflow. The layout and design of the benches support the workflow and specialised equipment. There is a new consumables store on the opposite side of the corridor which allows scientists to collect clean equipment and ingredients without entering the Media Lab.

Large windows on the exterior façade allow natural light into the space, providing a pleasant working environment.

Glazed walls to an interior corridor and the adjacent laboratory ensure a visual connection between workers in the Media Lab and scientists passing by.

The Media Lab will be able to continue functioning whilst the remainder of the Master Planning is implemented.

