



BSL-3 RESEARCH FACILITIES

CSIR OPEN-ACCESS STATE-OF-THE-ART BSL 3 FACILITY



The CSIR Biosafety Level 3 (BSL-3) laboratory is a state-of-the-art facility which enables scientists to conduct research and proof-of-concept studies in developing new diagnostics or therapeutics in HIV/Aids, TB, and other infectious human diseases research areas. The facility, also known as the high containment facility is a controlled access laboratory required for all experiments involving Hazard Group 3 pathogens (P3) of high potential risk to laboratory personnel and the environment.

The BSL-3 is accessible to researchers nation-wide and internationally. The costs vary from case to case, and this is negotiated at the point of closing the agreement.

KEY INFRASTRUCTURE AND EQUIPMENT

The laboratories are equipped with ESCO Airstream Class II BioSafety cabinets (BSC) for manipulation of live pathogens, high capacity ThermoScientific Forma 700 Freezers and New Brunswick Galaxy 170R Incubators. In addition, the HIV BSL-3 has S- and C-1000 Thermal Cyclers, Culture Microscope and Beckmann Coulter DTX 880 Multimode Detector as well as Optima L-80XP ultracentrifuge while the TB BSL-3 has fluorescent microscope. The BSL-3 facility is managed through Desigo Insight Building Management System (BMS) which enable the CSIR to monitor functionality of critical equipment. It also uses a STARLIM laboratory information management program to track and monitor resources and reagents.

SAFETY EQUIPMENT

The laboratory has been designed with safety in mind; it is accessed via two self-closing and self-locking doors to restrict and control entry while provision is made for independent laboratory suites to enable research on the different organisms to be manipulated in separate lab space. Protective laboratory clothing with a solid-front such as wrap-around tie-back gowns and coverall (suitable for protection against infectious agents) are worn by workers when in the laboratory.



MEET THE MANAGER OF THE BSL-3

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