

Laboratory setup

Space for washing and storage.

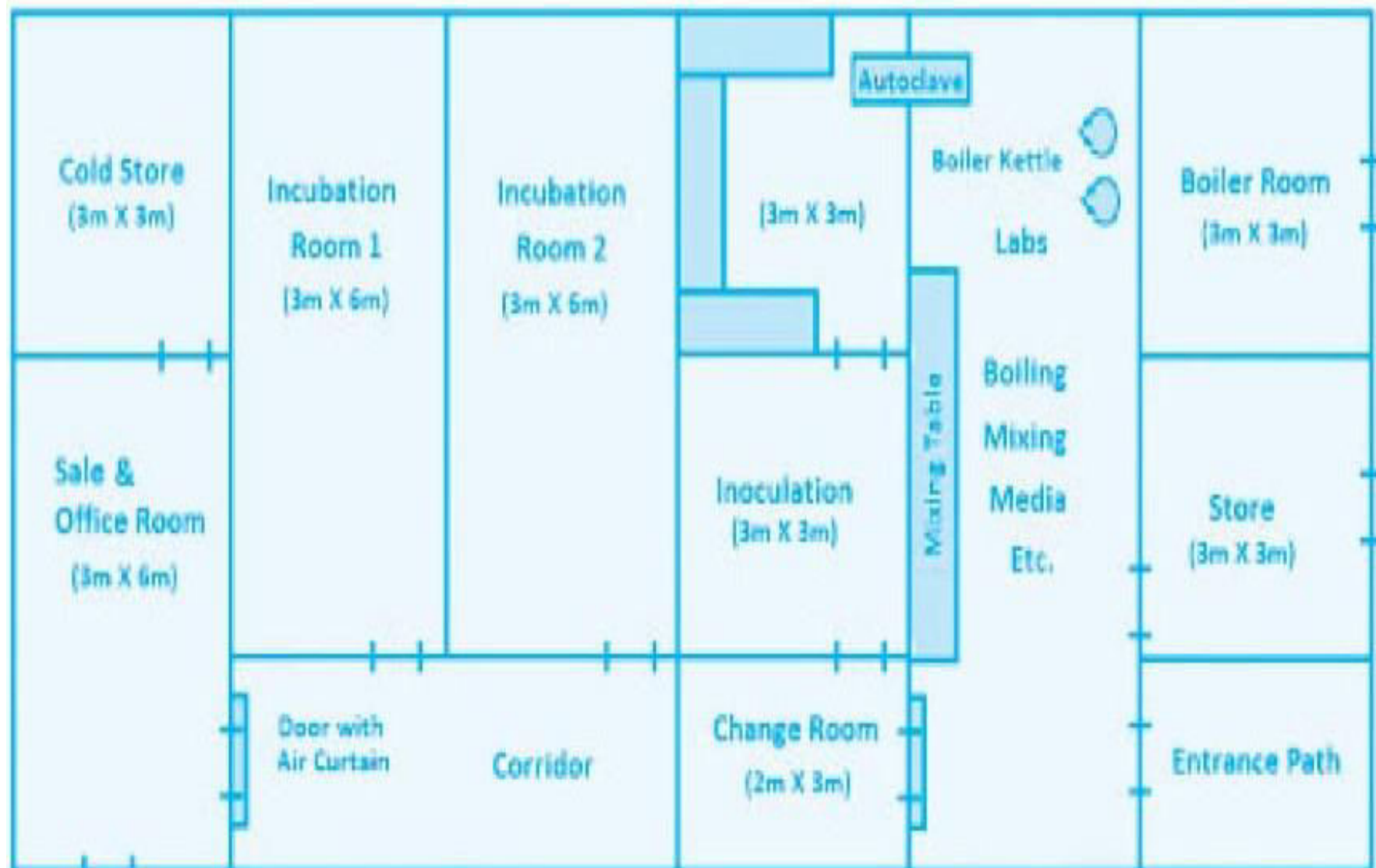
Sterilization room

Inoculation room

Culture room (incubation room)

Observation and inspection room.

Data collection and management room.



Door



DIRTY AIR

1st Stage

Dirty room air enters the air cleaner.

2nd Stage

Air is processed through a Pre-Filter where some particles are absorbed.

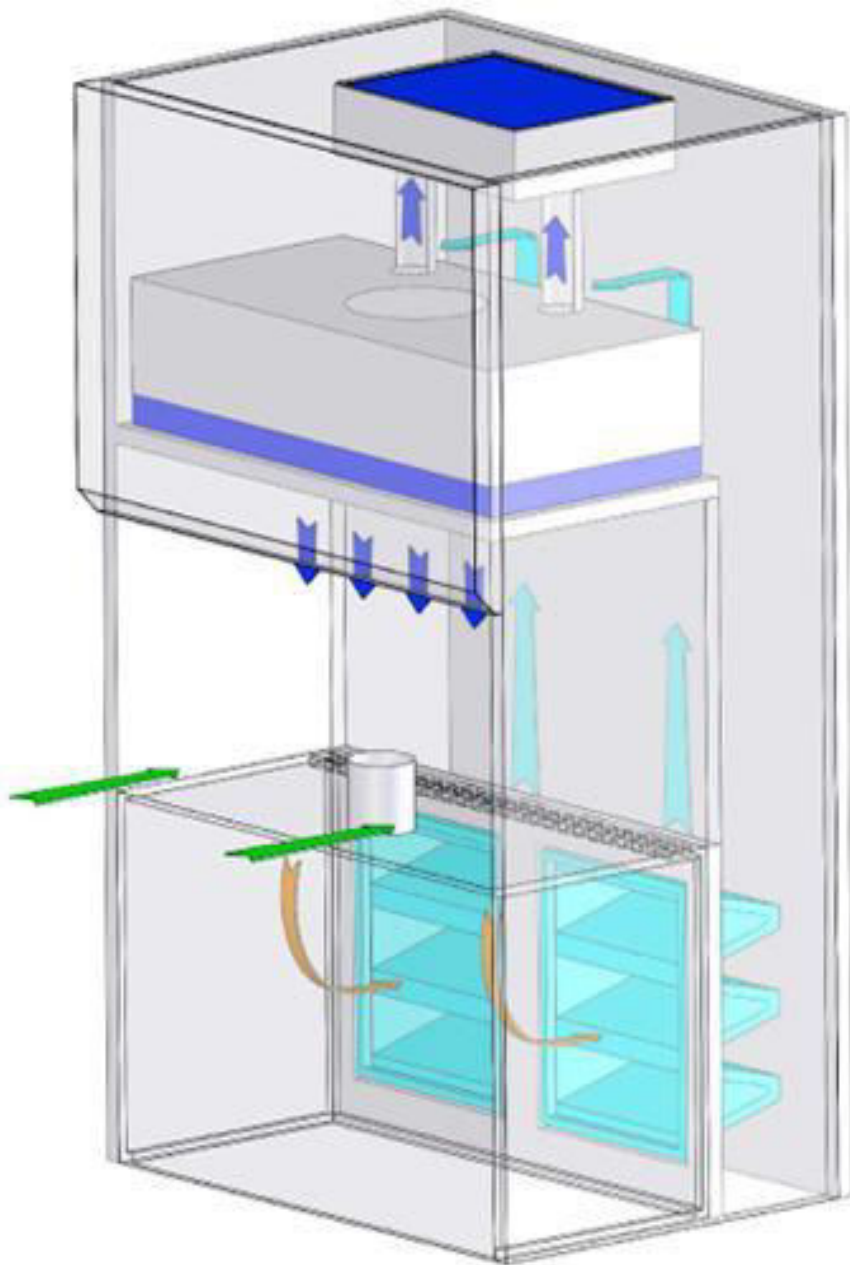
3rd Stage

Air is purified by passing through a final HEPA Filter with efficiency up to 99.97% on particulates down to .03 micron in size.

4th Stage

Clean air is discharged into the work area and creating a positive pressure laminar flow hood.

CLEAN AIR



- ambient air
- partially contaminated air
- HEPA filtered air
- partially filtered air

❖ **BASIC REQUIREMENT FOR A TISSUE CULTURE LABORATORY**

For the successful achievement, the following general basic facilities are required:

- Equipment & apparatus
- Washing and storage facilities
- Media preparation room
- Sterilization room
- Aseptic chamber for culture
- Culture rooms or incubators fully equipped with temperature, light and humidity control devices
- Observation or recording area well equipped with computer for data processing

Careful planning is an important first step when considering the size and location of a laboratory.

- Isolation from foot traffic.
- No contamination from adjacent rooms.
- Thermostatically controlled heat.
- Water and drains for a sink.
- Adequate electrical service.
- Provisions for a fan and intake blower for ventilation.
- Good lighting.

Washing Area

The washing area should contain large sinks, some lead-lined to resist acids and alkalis, draining boards, and racks, and have access to demineralized water, distilled water, and double-distilled water. Space for drying ovens or racks, automated dishwashers, acid baths, pipette washers and driers, and storage cabinets should also be available in the washing area.