Oxford Brookes University Bioinnovation hub equipment

Training will be provided on all pieces of equipment, it is expected that all users will work to OBU H&S/local rules. Users must have completed the OBU lab safety induction before working in the labs.

General preparation apparatus (use as required)

pH meter, magnetic stirrer, top pan balance and fine balance, fume hood, bench top autoclaves, drying cabinets, cold room access, fridge and freezer space

Molecular biology facilities

- PCR machines (access as needed)
- qPCR (1 run/wk) - Applied Biosystems 7500 or BioRad CFX96 Real-Time System
- BioRad TransBlot Turbo (access as needed)
- BioRad ChemiDoc XP gel documentation system (access as needed)

*Agarose gel electrophoresis, protein gel tanks and power packs are not offered as a core facility (but will be available in the Student BioInnovation hub).

Plate reader

Tecan absorbance plate reader (405, 450, 492, 595, 620nm filter sets) + plate washer (access as needed).

Centrifuges

Fair access per floor standing centrifuge type; 3h/week daytime 1 overnight spin/week

Low speed, high capacity:
- Beckman J6 M1 centrifuge (can run 15ml, 30ml, 50ml, 250ml, 500ml tubes up to max. 6x 1L)
- Swing out rotors: JS 4.2 and JS-7.5.

High speed (up to 25K), medium to high capacity:
- Beckman Avanti J251

Ultracentrifuges (up to 70K with available rotors):
- Beckman LE80K and XPN80 (new in 2015).
- Swing out rotors: Sw32Ti with Sw32 and Sw32.1Ti buckets and Sw55Ti.
- Fixed angle rotors: 70Ti, 70.1Ti and 45Ti.

Cell culture facilities

- Envair 4ft Class II (fair usage).
- 3 x 6ft laminar flow hoods (access as needed).
- Dedicated space in 37°C humidified 5% CO2 incubator and media fridge.
- Water bath, inverted microscope, low speed centrifuge (15ml-50ml capacity).

Bacteria growth facilities

- Static incubators at 25°C, 30°C, 37°C
- Shaking incubators 37°C default (other settings can be used if required)

Baculovirus growth facilities

- Class II hoods dedicated for baculovirus work
- Warm room (28°C) growth facility with orbital shakers and biological stirrers

Coming soon

Freeze drying facilities
Other facilities and expertise available

- DNA sequencing pick up on-site (Source Bioscience or Eurofins)
- On-site New England Biolabs and Promega freezers
- Bioimaging unit/microscopy consultancy (light, fluorescence and confocal microscopy, TEM, SEM, SBF-SEM)
- Protein production and purification service (Oxford Expression Technologies Ltd)
- Wave bioreactor (in collaboration with Oxford Expression Technologies Ltd)
- Fluorescence plate reader (Tecan F200Pro)
- Izon qNano
- Large scale plate pouring
- Cryogenic storage