

Lab for Biomanufacturing

Location

E6 4107

Management

Director:

- Dr. C. Perry Chou (cpchou@uwaterloo.ca) x33310

Also –

- Prof. Murray Moo-Young (mooyoung@uwaterloo.ca) x84006

Tours given by:

- Kajan Srirangan (kajan.srirangan@uwaterloo.ca)

Users

- Graduate students (Chemical Engineering)
- Industry - Centurion Biofuels

Research

- Engineering microbes for products
- Metabolically engineering different organisms
- Fuel production
- Alternative fuels
- Biopharmaceuticals

Selected Projects

- Engineering *E. coli* (and others) for biopropanol

Equipment

- Wave Bioreactor SYSTEM20/50EHT accompanied by WAVEPOD (GE Healthcare)
- CELL-tainer Bioreactor (CELLution Biotech)
- VirTis Omni-Culture Bioreactor (VirTis - they haven't made them for some time)
- New Brunswick/Eppendorf BioFlo 115 Bioreactor (Eppendorf)
- GE Healthcare/Amersham Biosciences AKTA Purifier FPLC
- Shimadzu Prominence HPLC system
- Misonix Sonicator 3000 Ultrasonic Cell Disruptor with Temperature ...
- JASCO J-810 Circular Dichroism Spectrometer
- Thermoscientific NanoDrop 1000 spectrophotometer
- Thermoscientific ST16R centrifuge
- Thermoscientific Heraeus Fresco 17 centrifuge
- Heitich zentrifugen universal 32R
- Sorvall Ultraspeed UX Ultra 100 centrifuge
- BioRad powerpack (we have one each of the 1000, 3000, and Basic models) with the powerpack adaptors and Sub-cell gel boxes

- Bio-Rad GenePulser Xcell with the BioRad ShockPod
- Bio-Rad MicroPulser
- National Labnet Company DyNA Light (Dual intensity UV Illuminator)
- PLAS Labs Controlled Atmosphere / Anaerobic Chamber

Supporting Partners

- NSERC

Access Rights

- Access to the lab can be gained through contacting Dr. Chou.
- The general public can access the lab, also by contacting Dr. Chou.
- Fees vary depending on the equipment needed.
- Contact should be given at least 48 hours prior to using equipment, but this may be longer depending on the equipment used
- There is training for equipment.