# 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 Prominenace 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
* Heitticn 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.