

# WHAT IS A CBI PROGRAM MEMBER?

## The Benefits of Membership

The NIH sponsors pre-doctoral training programs in areas of national need. Recently the NIH established a program targeting the Chemistry-Biology Interface with the intent of training chemists able to speak freely with biologists and vice versa. This was prompted by the growing importance of this area in the biotechnology and pharmaceutical industries, where such communication is increasingly essential.

Since NIH training programs are recognized world wide, membership in the CBI Program demonstrates to future employers, that a student has designed his or her training at UMass to match this national need.

Applications should be directed to the CBI Program Director Lynmarie Thompson.

## Requirements

### UNDERGRADUATE COURSEWORK:

Basic courses in organic chemistry, physical chemistry, biochemistry

### CBI COURSEWORK:

- BIOCHM 597A (Drug Design)     BIOCHM 797A (Ethic Condt/Res)
- CHEM 791A (Seminar: Student Res) - 2 Semesters     CHEM 797I (Seminar: Chalk Talk) - Continuous enrollment

### Biological Science Electives (one fr. list)

- ANSCI 597A (Immunology)
- ANSCI 672 (Molec Med)
- BIOCHM 623 (Adv Gen Biochm)
- BIOCHM 642 (Adv Molc Bio)
- BIOL 572 (Neurobio)
- BIOL 580 (Developmental Bio)
- BIOL 692C (Cell & Molc Neuro)
- MC-BIO 641 (Adv Cell Bio)
- MIC-BIO 540 (Immunology)
- MIC-BIO 565 (Mol Genetics Lab)

### Chemical Science Electives (one fr. list)

- CHEM 551 (Adv Org Chem)
- CHEM 650 (Metals in Bio)
- CHEM 728 (Phys Biochm)
- CHEM 777 (NMR)
- CHEM 791A (ST Bioanly Chem)
- CHEM 791B (Mass Spec)
- CHEM 891G (Grad Core [OP])
- CHEM 891G (Grad Core [ABI])
- CHEME 592B (Intro Biochm Eng)
- CHEME 697A (Chem Princ Eng)
- PSE 607 (Intro Synth Polym)
- PSE 760 (Org Polym Rxns)

### LABORATORY ROTATIONS

The rotation format is flexible, to mesh with the requirements of each graduate program.

### THESIS COMMITTEE

Program Members will satisfy the degree requirements of their home department/program, but will constitute a thesis committee which reflects the chemistry-biology interface. This is achieved by including a member of the CBI Training Faculty from the chemical side for students in biological degree programs and vice versa.

## Other benefits

### FINANCIAL SUPPORT

- 1) Program Members are eligible for consideration for a funded CBI Traineeship (nominations are submitted by research advisors annually in April).
- 2) Program Members are eligible to apply for a CBI Travel Award to offset the costs of travel to scientific meetings.

### CBI SHARED FACILITIES - CBI Reading Room

Available to the CBI community for access to journals and advanced computing facilities.