Biochemistry

ITHACA

Departments of Biology & Chemistry * Ithaca College * Center for Natural Sciences * Ithaca, NY 14850-7270

Who to Contact

If the Biochemistry Program at Ithaca College sounds interesting to you, contact the **Biology Department** Administrative Assistant at **607-274-3161.** You will be put in contact with faculty members who can answer any questions. In addition, you are encouraged to visit the campus and the departments if possible. If you will be in the area, contact us and we will arrange a tour of our facilities and provide you an opportunity to meet members of the faculty and students currently enrolled in our program.

Faculty and their Field

Dr. Vicki Cameron, Biology Department, Molecular Biology

Dr. Edward Cluett, Biology Department, Biochemistry and Cell Biology

Dr. Jean Hardwick, Biology Department, Vertebrate Physiology/ Neurobiology

Dr. Keri Lee, Chemistry Department, Biochemistry

Dr. Kirwin Providence, Biology Department, Cell and Cancer Cell Biology

Dr. Marc Servetnick, Biology Department, Developmental Biology/ Embryonic Induction

Dr. Andrew Smith, Biology Department, Animal Physiology, Biomechanics

Dr. Scott Ulrich, Chemistry Department, Biochemistry and Organic Chemistry

What's so special about being a Biochemistry major at Ithaca College?

Breadth of Coverage

The departments of Biology and Chemistry believe strongly that an undergraduate education in Biochemistry should expose students to all facets of Biochemistry and provide a broad education in the liberal arts. College general education requirements ensure that students are exposed to the humanities, social sciences and fine arts. Faculty in both departments have expertise in classical biochemistry and in modem molecular biology and genetics. Laboratory aspects of modern biochemistry are covered in the required Chemistry Laboratory Courses and in the required Genetics and Cell Biology courses. Because our coverage is broad, students who graduate with a degree in biochemistry are qualified to enter graduate programs, medical, dental and optometry schools, and to pursue careers as laboratory technicians or health administrators. We provide a solid base of required courses in biology, chemistry and biochemistry while at the same time allowing students to pursue their particular interests in advanced courses and in original research.

Class Size

The introductory classes for biology and chemistry generally enroll about 100 students. All laboratory sections are taught by faculty members rather than teaching assistants. Once you finish your freshman year, typical class size is small. Many classes have no more than 16 students and the senior year required biochemistry courses have never enrolled more than 13 students. Why is this important? As a student, you gain the most from your educational experiences when you have the opportunity to interact closely and often with those who are providing your education, the faculty. Because the class sizes are small, everyone in the program knows your name, is aware of your abilities, both strengths and weaknesses, and can provide the kind of assistance that will be of the most benefit to you. Faculty make a special effort to be available to you and to provide the help and encouragement that you need.

Research Opportunities

Biochemistry majors have the opportunity to carry out research projects under the supervision of a faculty member. Students who elect to do a research project have an opportunity to experience what the science of Biochemistry is really about. Even though research is not required, most majors elect to participate and find the experience very stimulating. Those students who participate find that this experience makes them appear particularly attractive when applying to postgraduate programs or for employment.

Other Advantages of the Research Experience

- ✓ An opportunity to work closely with a faculty mentor
- ✓ Possible co-authorship of scientific papers
- ✓ Presentation of research results at the National Conference on Undergraduate Research or at professional scientific meetings
- ✓ Opportunity to spend up to 10 weeks during the summer being paid for the research you do at Ithaca College.

Facilities

Ithaca College has the facilities to carry out sophisticated experiments in the teaching laboratories and to provide outstanding research opportunities for students. The departments moved into new quarters in a state-of-the-art $20,000,000 science building in January 1993. In the last several years we have competed successfully for federal funds to update our plant growth facilities and to modernize the laboratory portion of our required genetics course. We received a corporate donation of $150,000 to purchase equipment to completely update instruction in biochemistry and cell and molecular biology. Our students routinely have access to equipment normally available only to graduate students and faculty members, for example, our state-of-the-art tissue culture facilities. Each faculty member has a personal laboratory where students work while carrying out their research projects. Some faculty members hold individual grants supporting their research with students. Faculty in the departments have recently been awarded more than $1,000,000 in grant funding.

Opportunities Working within the Departments

Each year the departments hire approximately 20 students who work within the departments. These students are paid for their work and assist both individual faculty members and the laboratory coordinator. Students are involved in helping to set up freshman laboratories,in general assistance within the departments, and as assistants in the introductory laboratory courses.

Successes of our Students

Biochemistry graduates have an outstanding success record. Many of our graduates eventually complete graduate school or post-baccalaureate training in one of the health science fields. Recent graduates have received fellowship awards to attend graduate school. Our students have competed successfully for admission to programs at Cornell, Harvard, Michigan, Penn State, Rochester, UCLA, Yale, and other institutions of similar stature. This record is particularly impressive given that the Biochemistry major has only been in existence since 1985 and that we graduated our first major in 1987.

Sense of Community

In addition to the educational opportunities available in Biochemistry at Ithaca College, one of the most important special things about being in the program is the strong sense of community. Because most students are involved in research in the departments, or work in the departments, or both, students know each other and their faculty very well. Students work together on class projects and the general attitude is one of cooperation rather than competition. This provides an atmosphere in which students can gain confidence in their abilities and their talents. It prepares students well for their future once they leave Ithaca College.