Student Opportunities and Research

The experience of doing a rigorous research project demonstrates to employers and graduate schools an ability to work and think independently and the persistence needed to complete a major project. Internships are especially beneficial because they are frequently used as a mechanism for attracting and evaluating prospective employees and graduate students. At Clarion students majoring in the Molecular Biology/Biotechnology program have a large number of opportunities and options for gaining research experience.

Scientists learn their profession in the same way that students in art and other professions learn theirs - by doing it. Hands-on research in close collaboration with an experienced scientist shows students the creative process of designing and carrying out an experiment and the critical thinking involved in analyzing the data. Students in the Molecular Biology/Biotechnology Program at Clarion are required to write up their results, and usually present their work at National and Regional scientific meetings, gaining insight and skill at both written and verbal communication.

Academic Credit for Undergraduate Research at Clarion

This is the common form of undergraduate research available at most teaching universities and colleges. At Clarion, opportunities of this kind are plentiful. Credit can be obtained through either of two courses. BIOL 499 offers students the opportunity to do advanced and extensive research projects over the course of 2-5 semesters. A typical experience will entail research, literature searches, participating in lab meetings where research projects are discussed and improved in a cooperative group, presentation at meetings and publication. Students can obtain up to 6 s.h. of credit for research. Since this is usually done during the academic year as part of the student's regular curriculum, no additional tuition is charged. Research can also be done under BIOL 360 which gives students the opportunity to "try out" their research abilities and interests on shorter and less intensive research projects.

Paid Summer Internships

These are available at companies, U.S. government laboratories, and major research universities on a competitive basis, depending upon grades, recommendations, motivation, dependability, and general suitability for research. Many are funded by the National Science Foundation or the Howard Hughes Foundation, and usually require that many of the participants come from teaching universities and colleges. Clarion students have been very successful in winning these awards.

The award typically includes a summer stipend and arrangements for room and board. A 12-week research project, accompanied by seminars from the research faculty, are common features. Similar internships are sometimes available from biotechnology companies although the focus tends to be less on training, and more towards applied research or productivity which will be beneficial to the company. The Molecular Biology/Biotechnology Program maintains a
computerized data base of internships available, and works with students to prepare a competitive resume' and application.

This is research done off campus in a lab at a company or research university. A co-op is unpaid; instead the student receives a varying number of credits (usually 6-12 s.h.) for the experience. Since the student receives academic credit towards graduation, tuition is charged. This process is less formal than that for paid internships. The molecular biology director will assist a student to obtain a suitable placement in a research laboratory, and the requirements of the co-op will be mutually arranged between the student, the research supervisor and the director of the Molecular Biology/Biotechnology Program.

Study Abroad

There is probably no experience in the liberal education curriculum which is more valuable and rewarding than the opportunity to study abroad for a semester or a year. Clarion maintains cooperative agreements with the University of Malta and the University of Melbourne (Australia) which allow students to study there while paying only their Clarion tuition and fees. Students may also attend numerous other universities throughout Europe under the ISEP program.

Students who have taken advantage of the study abroad opportunities at Clarion invariably come back as more worldly, mature and self-confident adults - intangibles of character which pay great dividends in interviews!

More information is available from the Office of International Programs, or from Lynn Hepfl