
THE COLLEGE OF
WOOSTER

BIOCHEMISTRY – One-year leave replacement beginning fall 2007. Teach Biochemistry I and II and Techniques in Biochemistry and Molecular Biology, plus either introductory chemistry with lab or chemistry for non-science majors; direct undergraduate research. The department has eight full-time faculty positions. Required senior thesis project for all graduates; active student/faculty research program. Send résumé, official graduate transcripts, three letters of evaluation, and a brief statement of research plans suitable for work with undergraduates to Dr. Paul L. Gaus, Chairperson, Department of Chemistry, The College of Wooster, 943 College Mall, Wooster, OH 44691. Applications will be considered as they are received, with a deadline of March 1, 2007, for full consideration.

Principal teaching duties would include Biochemistry I and II, which are chemistry department courses that contribute also to our additional major in *Biochemistry and Molecular Biology*. Other teaching duties would include a contribution to our lab-based *Techniques in Biochemistry and Molecular Biology* taught jointly with professors from the biology department. There may also be teaching assignments in general chemistry and in our Independent Study research program for juniors and seniors.

The College of Wooster is a selective liberal arts college and has been a research-intensive PUI since 1948, when a senior research project and thesis was first required for all students. Every graduate completes a one-year original research project working one-on-one with a faculty mentor, writes a thesis, defends it in an oral examination, and presents a poster describing the results to the whole department. The College has played a national role in encouraging and strengthening undergraduate research, from the 1959 NSF-supported conference "Research and Teaching in the Liberal Arts College" held at Wooster, to the meeting of the Council on Undergraduate Research Conference in 2000, "The Many Facets of Undergraduate Research," also held at Wooster.

Wooster's curriculum emphasizes critical thinking and writing in small classes, beginning with the First Year Seminar, in which a professor engages a class of 15 students in discussion and writing, while also serving as the students' academic advisor. Recently the College revised its curriculum to include a stronger emphasis on writing in the disciplines. In the sophomore year, students take a writing course in the major; in the Department of Chemistry, the writing course is the Organic Chemistry Laboratory. Students gain experience in finding specialized reference information in the library and in writing laboratory reports describing their experiments. In the required junior level course called Introduction to Independent Study, students search the chemical literature using SciFinder Scholar, read review articles and primary articles from the professional literature, write papers in American Chemical Society format, and give an oral report. This course stresses independence and individual effort. The last paper in the course describes the proposed Senior Independent Study (I.S.) project.

In Independent Study, seniors do original research on topics of interest to the professors. Since 1996, the eight chemistry faculty have published 55 papers in refereed journals, with 28 student co-authors. Forty-seven chemistry and biochemistry students have made presentations at national and regional meetings of the American Chemical Society, the National Conference on Undergraduate Research, the American Crystallographic Association, and the MERCURY Conference on Computational Chemistry.

Between 25 and 30 students graduate each year with a degree either in chemistry or biochemistry & molecular biology (BMB). This tradition extends back to 1950, and is unusual in that there are

approximately equal numbers of men and women among our majors. According to the Franklin & Marshall surveys, Wooster consistently ranks among the top three colleges in the nation whose graduates elsewhere earn a Ph.D. in chemistry. One third of the 2003-06 graduates went directly to graduate school, and more indicated plans to do so in the future.

The College has received two major grants from the Howard Hughes Medical Institute, the most recent for \$800,000 to expand connections in science education by broadening student research in the sciences and medicine, expanding interdisciplinary aspects of the curriculum, and establishing a Science Education Center to enhance and coordinate science education outreach. Over the years, summer research at Wooster has been supported by NSF-REU, NSF-RUI, NSF-CAREER, Research Corporation, ACS-PRF, HHMI, and the College's Sophomore Research Program. The Department occupies a completely renovated 36,000 sf facility. The Department is well equipped with instrumentation such as 400 MHz NMR, GC-MS, HPLC, FPLC, UV-Vis, FT-IR, and a fluorescence spectrophotometer and more, to enable the eight faculty members and their students to carry on research.

For further information about the Department of Chemistry at The College of Wooster, see <http://www.wooster.edu/chemistry>.

The College of Wooster is an independent college of the liberal arts and sciences with a commitment to excellence in undergraduate education. The College values diversity, strives to attract qualified women and minority candidates, and encourages individuals belonging to these groups to apply. Wooster seeks to ensure diversity by its policy of employing persons without regard to age, sex, color, race, creed, religion, national origin, disability, veteran status, sexual orientation, or political affiliation. The College of Wooster is an Equal Opportunity/Affirmative Action Employer. Employment is subject to federal laws requiring verification of identity and legal right to work in the United States as required by the Immigration Reform and Control Act. Drug-free workplace.