Biochemistry at Smith College: A Short History

Although the spring of 2007 marks the 50th anniversary of the Program in Biochemistry at Smith College, the teaching of biochemistry dates back to the earliest days of the institution. Just one year after the College was founded in 1876, Bessie Talbot Capen, one of the earliest women graduates of the Massachusetts Institute of Technology, was hired to teach chemistry and botany. In 1880, she left to establish her own preparatory school for girls in Northampton, encouraged by President Seelye, who correctly envisioned an important role for Miss Capen's school in the training of future Smith College students. John Tappan Stoddard then took over instruction in chemistry; his leadership in the emerging department lasted for nearly four decades, from 1880 until 1919. During the early years, all Smith College classes met in the Main Building, now College Hall. In 1887 the sciences moved to the newly built Lilly Hall, and in 1898 chemistry moved to its own building, Chemistry Hall, renamed Stoddard Hall after Stoddard's death. Burton Hall was built later, in 1914, and eventually housed the departments of Botany, Zoology and Bacteriology and Public Health.

During Stoddard's time, the chemistry department grew both in the size of its faculty and in the breadth of its offerings. In 1908, Mary Louise Foster (Smith College Class of 1891; AM, Smith College, 1912; PhD University of Chicago, 1914) joined the department, and in the years that followed, played a major role in introducing the field of biochemistry to the curriculum. She offered the first biochemistry course (Chemistry 32) during 1916-17, and with the exception of the semesters she was on sabbatical leave, taught this and other biochemistry courses until her retirement in 1933. Mary Louise Foster was also actively involved with the formation of the first interdepartmental majors at the College in 1925-26 and later wrote on the significance of interdisciplinary studies in undergraduate education. The four interdepartmental majors listed in the 51st year Catalogue of Smith College (1925-1926) were all within the sciences: Premedical, Public Health, Bacteriology and Biochemistry-Zoology.

In the following decades, interdepartmental major offerings at the College changed frequently, with both additions and deletions to the curriculum. The Biochemistry-Zoology major existed for only four years, to be replaced, after a hiatus, by a new interdepartmental major, Physiological Chemistry introduced in the mid 1940s. During the early 1940s, the chemistry department offered both a chemistry and a biochemistry major. These options were again not long lasting, the frequent revisions seen in the Smith College course catalogues reflecting
a perceived necessity for including biochemistry in the curriculum coupled with the uncertainty of the best way to do this.

Finally, in 1957-58, the interdepartmental major Physiological Chemistry was eliminated and in its place, a new interdepartmental major, Biochemistry, established. The new major quickly became very successful and remains so today. In 1957-58, chemistry was taught at Stoddard Hall, and Zoology, Botany, and Bacteriology and Public Health in Burton. In 1966, the latter three departments merged to form the Department of Biological Sciences. 1966 was also the year of the completion of the new Clark Science Center, which was to house Chemistry and Biological Sciences under the same roof. The physical bringing together of these disciplines no doubt played a significant role in the success we celebrate this day.

Achieving this momentous mark of 50 years, Biochemistry is the oldest interdisciplinary major at Smith College. Biochemistry has become a discipline that has merged and integrated many aspects of cell biology, genetics, organic and natural products chemistry, while developing new knowledge and paradigms that are uniquely its own. Biochemistry now includes a vast body of knowledge that belongs to neither biology nor chemistry, as well as methodologies and techniques that allow biochemists to formulate and test questions not examined in other disciplines. It is a rapidly changing field, evolving and redefining itself from day to day as exemplified by areas such as genomics, proteomics, and drug design.

L. Burk
April 2007