CHAPTER III

Robinson and the War Years: 1931-1949

In 1931 Charles S. Robinson succeeded Cullen as Chair of the Department (See the Appendix, *Shavings* for additional details.). At that time other faculty included Johlin as Associate Professor and Walter E. Wilkins as Instructor.

In a later "Appreciation," Robinson's successor, William J. Darby, wrote: "Dr. Robinson was educated in the Chicago public schools, the University of Illinois, and the University of Michigan, Ann Arbor, Michigan. From the latter institution he received successively the B.A., M.S. and Ph.D. degrees in 1907, 1909 and 1917, respectively. During the First World War, Dr. Robinson was on the staff of the Rockefeller Institute Hospital where he was associated with the distinguished innovative medical and clinical chemist Donald D. Van Slyke. There he taught a course in which was enrolled a number of young chemists who subsequently became leaders in biochemistry: A. Baird Hastings, Professor of Biochemistry at Harvard; Wendell Griffith, Professor of Biochemistry at St. Louis University and the University of Texas; Edward A. Doisy, Professor and Chairman of Biochemistry at St. Louis University and Nobel Laureate; and Max Dunn, Professor and Chairman of Chemistry in Los Angeles. After about 14 years as a chemist at the Experiment Station, Michigan State College, East Lansing and a year of research and study at Cambridge University, Robinson joined the faculty at Vanderbilt.

Robinson was well known for his research contributions to the field of gastrointestinal absorption and the biochemistry of the gastrointestinal tract. In the Medical School, he inspired a close

liaison between the preclinical and clinical departments; he was responsible for the establishment of a central clinical chemical laboratory and he was especially interested in improving the Medical Library."

During Robinson's tenure the faculty began to grow. Between 1934 and 1940 Morton F. Mason, Ruth M. Kraft, Herman A. Jones, J. Max Little, and William R. Sutton were appointed as Instructors. There was little change in the organization of medical and graduate course offerings during this period.

Beginning in 1941 the Medical School moved to an accelerated program as a result of the Second World War. Again there was little change in course offerings, but faculty growth continued. E. Hugh Luckey (later Chairman of the Department of Medicine and also Dean of Cornell Medical School), Margaret Kaser, Hugh H. Mills, W.R. Sutton, Gladys R. Bucher, Marjorie Rogers and Dominic Dziewiatkowski were appointed as Instructors. James A. Stekol and Paul Hahn were appointed as Assistant Professors.

William J. Darby, who was destined to serve as the next Chair of the Department, was appointed as Assistant Professor of Biochemistry in 1943. He was also named Director of Nutrition Studies and Assistant Professor of Medicine in Nutrition. A new course, Biochemical Aspects of Nutrition was begun. These events initiated a long and strong role of nutrition education and an international role in nutrition research for the Department. Following World War II, another interdepartmental relationship, in clinical chemistry, was greatly strengthened by the appointment in 1945 of Ann S. Minot as Associate Professor of Biochemistry and Director of the Clinical Chemistry Laboratory. In his annual report to the Dean, Robinson commented on these two new interdepartmental developments, nutrition and clinical chemistry. "Their official connection with this Department gives them a professional standing which is desirable for them, adds to the teaching program of the Department and enables them to introduce subjects to the students which are later emphasized and expanded in the teaching program of the respective divisions." In another vein Robinson commented, "With the dearth of trained people

resulting from the war, it seems to me that our obligations to train graduate students can no longer be avoided." The basis of this statement is unknown since graduate training had been a stated priority from Cullen's first days. It seems probable that the war had simply interfered with the development of the program and with student recruitment. The primary research subjects in the Department during the Robinson years included intestinal absorption, sulfur metabolism, insulin action, iron nutrition, phosphorous toxicology, and studies with radioactive manganese.

In 1946-47 Carl E. Anderson replaced Dziewiatkowski. Oscar Touster, Robert Gale, C. Freeman Luckey, Charles Sheppard and James Goodall were added as Instructors in 1947-48. Cooperation with other Departments included participation in the lecture course in Physiology. Sheppard gave the first lectures on the use of radioisotopes in biology and medicine to the faculty at this time. Darby became Professor of Biochemistry in 1947-48, and Merwin Grimes was added as an Instructor. Hahn and Sheppard left the Department during 1948-49. The "biophysical" content of the medical biochemistry course was reduced considerably at this time when discussion of nuclear energy and other "physical" topics were left to Howard Curtis, the recently appointed Chairman of Physiology. Cooperation with the Department of Chemistry grew with the introduction of Bio-organic Chemistry, a joint summer graduate course by Touster. Anderson, Selmer Peterson, Professor and Chairman of Chemistry, and Curtis organized a course for graduate students, surely among the first in the country, in the "Use of Radioactive Isotopes as a Research Tool".

Laboratory in Biochemistry for the medical students had, since the earliest days, been considered to be of primary importance to a quality medical education, although the content of experiments over the years changed with fashions in the field and the interests of the faculty. During the 1940s, Robinson's earlier experience in the Van Slyke laboratory led to the appearance of a "Van Slyke" apparatus in almost every Biochemistry faculty laboratory. Robinson used this manometric device for all sorts of analyses and urged the faculty to do likewise, but it appears, without much success. The

Van Slyke device for determining CO_2 combining power of plasma was, however, a prominent apparatus in the medical student laboratory; every student had to show proficiency in this determination in order to satisfy the requirements for first year biochemistry. According to John Coniglio, a future faculty member but a graduate student at the time, the judge was Robinson himself, who personally instructed and personally checked the students off on the final day of a full week exercise. Nevertheless, those who were in the School of Medicine during Robinson's time agree that he was a warm advocate for the medical students and contributed much to the early creation of the continuing positive interaction of students with faculty in and out of the classroom.