CHAPTER I

Beginnings

"Biochemistry" in Nashville is over 150 years old. It evolved here, as elsewhere, from chemistry under the impetus of the needs of medicine and biology for a more rational foundation. The earliest introduction of chemistry in relation to biology into an academic environment in Nashville was the appointment of J. Berrein Lindsley, M.D. as Professor of Chemistry and Pharmacy upon the establishment of the Medical Department of the University of Nashville in 1851. Beginning in 1854 chemistry lectures were given by Lindsley along with a laboratory course on practical chemistry which also embraced toxicology, pharmacy, and soil and water analysis.

The University of Nashville was closed during the Civil War but the medical unit survived. In 1872 the Central University of the Methodist Episcopal Church, South, was chartered, though with minimal academic structure. And in 1873 the name was changed to Vanderbilt University in recognition of the financial gift of Cornelius Vanderbilt. This gift opened the door to Vanderbilt's future and was due primarily to the influence of Methodist Bishop Holland McTyeire upon Commodore Vanderbilt. Only nine years had elapsed since the Battle of Nashville. A new campus was begun for the non-medical units in the present location, the "West Campus." Medicine, recruited from the University of Nashville, continued in its original location on the "South Campus," near the Cumberland River.

A new beginning was made in Medicine, Law, Bible, and Academic and Preparatory Studies in 1875. At that time Lindsley became Professor Emeritus and was succeeded by James M. Safford as Professor of Chemistry.

The first Vanderbilt University diplomas in Medicine were issued in 1875.

By 1897 the Medical Department of Vanderbilt University was located in a four-story building on the corner of Elm and Summer Streets. The Chemical Laboratory occupied the first floor in the eastern half of the building. The first Dean of the Vanderbilt School of Medicine was William L. Dudley, who was also Professor of Chemistry! The chemistry faculty also included Olin West Ph.D., M.D., Demonstrator of Chemistry and Assistant to the Chair, George W. Williamson B.A., John W. Hanner B.A. and J.S. Dye, Assistant Demonstrators. The course, "taught by lectures and recitations fully illustrated by experiments," covered both inorganic and organic chemistry, with special reference to medicine. The practical laboratory course included qualitative analysis and urinalysis. In the laboratory each student had a desk assigned to him in which "he can keep his apparatus under lock and key during the entire session." The chemical laboratories were equipped "with all of the apparatus necessary for the prosecution of the most thorough and advanced work in medical chemistry."

James H. Kirkland, Chancellor of the University at the time, gave a candid view of the turn of the century student body in medicine in a much later 1937 interview with the *Nashville Banner*. He suggested that the bulk of the students undoubtedly abandoned the practice of medicine and returned to farming and other pursuits shortly after their training and "this I regard as a fortunate fact."

In 1910 S. M. Sheib became the first Professor of Physiological Chemistry under Dudley, and in 1911 the first course whose title included the explicit term "Physiological Chemistry" was begun. This followed, by some 36 years, the establishment of the first definitive United States program in physiological chemistry by Russell Chittenden at Yale, but is impressive when allowances are made for the devastating social and financial consequences of the Civil War in the South. The Medical School entered a period of growth in size and quality following the Flexner Report of 1910 which, though critical of the many weaknesses, recognized that Vanderbilt was the best hope for academic excellence in medicine in its region of the South. Financial support began to arrive from the Carnegie Endowment, the Rockefeller Foundation and others interested, as had been Commodore Vanderbilt, in stimulating excellence in higher education in the South. An "identity" crisis arose as these gifts pulled the University ever further away from its origin in the Methodist Church. Most persons associated with the University and the church recognized that freedom of the faculty and the Board of Trust from organized religious control was critical to the future success of the University, most certainly of the future of research in scientific fields such as biochemistry. After a sometimes-bitter legal dispute, the academic freedom of Vanderbilt University was assured by a decision of the Supreme Court of Tennessee in 1914 that effectively removed the University from supervision by the church. Without, however, the foresight of the Methodist Church, there would have been nothing for later scholars and philanthropists to build on, certainly not in Nashville or so soon after the Civil War.

Although the Medical Department became a professional school in 1915, there was a considerable delay in expansion of the University and the Medical School as a result of the First World War and the lack of major financial resources. After the war Chancellor James Kirkland again sought the help of Abraham Flexner and Wallace Buttrick, officers of the Rockefeller-sponsored General Education Board (G.E.B.). This organization, founded by John D. Rockefeller in 1903, was specifically charged with the development of key educational resources. The combined efforts of Kirkland, Buttrick of the China Medical Board and the G.E.B.,

and Flexner of Rockefeller Institute and the G.E.B., led to major gifts from the G.E.B. and the Rockefeller Foundation. Kirkland made an inspired choice in 1920 when G. Canby Robinson, a Johns Hopkins graduate, then Dean of the School of Medicine at Washington University in St. Louis, was persuaded to take on the challenge of being the first Dean at the new Vanderbilt School of Medicine. Chancellor Kirkland and Dean Robinson then prevailed upon the General Education Board and the Carnegie Corporation for over four million dollars to create an entirely new physical plant for the School of Medicine. It was, initially, to be located on the old campus, not with the rest of the University on the new campus in "West Nashville." According to Mims, Robinson pressed hard for more money than this, a great deal more money. He thought the Board had implied the availability of perhaps as much as 20 million dollars, but Kirkland, knowing that this was completely impossible, worked to persuade Robinson to accept what was actually on offer. Kirkland knew that it would take time to build a medical school the equivalent of Harvard or Johns Hopkins. For him it was a question of beginning the climb toward that goal with the resources possible. Robinson apparently came close to resigning the post of Dean of the new Vanderbilt School of Medicine because of his disappointment with the financial resources to be committed by the Board to create a "modern medical school" with "modern standards," and with the timetable for such development. Eventually, Kirkland convinced Robinson to remain as Dean. From this point on, Robinson took charge and committed his full effort and enthusiasm to the successful creation of the modern Vanderbilt University School of Medicine. At this late date in 1921 another crucial suggestion was made; it is not clear by whom. Shouldn't the new Medical School be built on the "West Campus" with the rest of the new University rather than in the old downtown site? The foundations accepted the idea and provided an additional three million dollars to accomplish this. The beginning, then, of the modern history of Vanderbilt School of Medicine and of its Department of Biochemistry, can be dated from 1925 when the Medical School

and Hospital building on the present campus site was completed. The long-term benefit for Biochemistry of this last minute decision to locate it on the same campus as the other science departments of the University can not be exaggerated.



Glen Cullen, Chair of the Department of Biochemistry, 1924-1931