

## Chapter 4 Medical School: University of Barcelona 1930-36

Ignacio Ponseti entered medical school in Barcelona in 1930, completing his degree requirements in 1936. His medical class picture shows that there were three women in a class of 102.

In contrast to American education, where undergraduate education precedes medical school graduate education, undergraduate collegiate education and medical education were combined curricula. Barcelona University integrated philosophy and liberal education into the medical curriculum. Ponseti recalls that middle European philosophic influences predominated, with emphasis on Goethe, Kant, Kraus, Hegel, and Nietzsche. (He noted that in the 1930s postgraduate Spanish physicians tended to study in Berlin and Vienna.) He was not exposed to the distinctly English philosophies of Locke, Donne, Dowland, Hooker and Newton. Nor was he exposed to the American Federalist Papers, the writings of Thomas Jefferson, Thomas Paine, or John Adams. These American liberal authors became part of his knowledge base only after immigrating to the United States.

In order to enter medical school, applicants took a week of tests, which covered not only scientific knowledge but also basics in philosophy, literature, Latin, and two modern languages. The philosophy of education of both the gymnasium and medical school resulted in the expectation that professors must help students pass their examinations, thereby making them productive members of Spanish society. Ponseti felt a close student-mentor relationship with his professors, and believes that he and his peers were able to glean the very best education in this learning environment.

The nature of his medical education at the University of Barcelona changed in 1931 when the Second Republic policies freed the university from the political control of Madrid. The Barcelona faculty had new freedom to pick medical textbooks used by progressive German-Austrian medical schools, which set the standard for progressive medical education<sup>1</sup>. A more subtle issue was the chilling effect of the Roman Catholic Church's imprimatur on textbooks. It was not uncommon for limitations to be placed on books coming from countries where the church did not have control over publications. This chilling effect was disappearing during Ponseti's

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<sup>1</sup> Prior to World War I Germany was viewed as a "Mecca" for progressive medical education and research. The Great War slowed or impaired scientific interchange but it returned in the interwar period. The ascendancy of British and American medical schools as sites of postgraduate medical education was a post-World War II phenomenon.

medical education. He observed that Madrid could impose (for a time) the choice of textbooks for courses offered in medical school prior to 1931. The political events of 1931 allowed the university more autonomy. Medical education was also improved by increasing the number of clinical staff on faculty. Professors were now clinicians—that is, active, practicing physicians and surgeons who brought the students the practical skills they would need in the patient care setting of day-to-day practice.

Dr. Joaquim Trias, who was professor of surgery when Ponseti entered medical school, was dean of the medical school from 1931 to 1934. He recruited careful, versatile doctors from the large city hospitals. These clinicians were made clinical professors as in other European centers. These changes led to a renaissance of medical teaching, and Barcelona University Medical School became a European model university. For the first time, students met in small study groups (much as they do today at the University of Iowa) for clinical teaching and basic science work. Eight to ten students observed professors on rounds or in surgery and then returned to the laboratory for the study of pathology or histology. The last two years of medical school functioned much like U.S. internships, with rotation onto various medical and surgical services. Medical students so well selected to succeed in their educational experience with excellent professorial support did not fail, unless they developed tuberculosis, which happened to an average of three students in every medical class, according to Dr. Ponseti.

While in medical school, Ponseti thought he would become a medical physician rather than a surgeon. He recalls that his summer employment between the ages of twelve and sixteen in his father's watchmaker repair shop required much fine handwork making parts for watches. This fine craftsmanship was part of the family upbringing, and would serve him well in orthopedic surgery. During the summers in medical school, Ponseti worked in the anatomy lab, embryology, and pathology. One summer, he worked in pathology at St. Pablo Hospital, one of the largest in Barcelona. There, he met Professor C. L. Pierre Masson, a cytopathologist for the University of Montreal, internationally known for his three-color staining technique for connective tissue, a technique that was revolutionary at the time. Ponseti was able to learn this staining technique, a valuable asset in that stage of his career.

Another of Ponseti's mentors was the eminent internist and professor of medicine Dr. Soler-Vicens, remembered as a serious man and an excellent teacher. Under him, Ponseti completed his medical service internship (equivalent to our medical service internship) during the last year of medical school.

Ponseti remembers that Dr. Winnett Orr was an invited guest lecturer from the United States to Barcelona University Medical School. Even before the Spanish Civil War, Orr's

management of compound fractures in the industrial accident practice was well-known among surgeons such as Drs. Trueta and Trias. Dr. Orr used more extensive plaster casting than his Spanish colleagues. The Orr technique was an accepted part of the medical school curriculum in Barcelona by 1936. Dr. Orr was better known in Spain than in the United States or other countries in western Europe<sup>2</sup>



Dean Joaquim Trias, Director of Vallcarca Hospital. (Moisès Broggi, *Memòries d'un cirurgià*, 153ff. The author wishes to express deep gratitude to Dr. Broggi for the illustrations related to military medicine in the Spanish Civil War.)

Ponseti's professors included Dr. Trias, Dr. Josep Trueta, and Dr. Francisco Jimeno-Vidal who had trained in treatment of fractures under Professor Lorenz Böhler in Vienna. Dr. Trueta is known for having enhanced medicine's basic knowledge of the kidney. After his emigration to Britain, he would become famous due to his description of a rare pathological condition in the kidney, which was eventually named for him (Trueta shunts). Dr. Ponseti is in possession of a copy of Böhler's textbook on fracture treatment, translated into Spanish from the original German by Dr. Jimeno. This cross-fertilization from Vienna to Barcelona was typical of shared medical knowledge in the 1930s. Ponseti and his peers benefited from a sound foundation of surgical principles provided by his faculty supervisors. This happy working relationship fostered in medical school promoted collegial relationships in the coming conflict. According to Ponseti, the faculty was apolitical until the outbreak of the war.

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<sup>2</sup> Dr. Ponseti notes that he met Dr. Orr again in 1942 as both he and Dr. Orr lectured to U.S. Army personnel at Fort Leavenworth, KS. Dr. Ponseti spent a six-week period in Omaha, NE, in the summer of 1942 where he reminded Dr. Orr of his influence on him in medical school.