I am delighted to appear today to discuss at your invitation the relationship between the pharmaceutical industry and medical education. This is an important topic and a timely one. There is considerable evidence that the pharmaceutical industry plays a very important, perhaps a dominant, role in the postgraduate education of physicians, dentists, and other health professionals. This role of the pharmaceutical industry in supporting postgraduate medical education has increased rapidly in recent years and, in my opinion, is a problem deserving of national attention.

Let me emphasize from the start that I do not consider this issue to be primarily a problem in drug regulation. While I will draw upon the experience of the Bureau of Drugs in citing a number of examples in this testimony, my remarks will also reflect views developed during two decades of personal experience as a student and a teacher of medicine before coming to the Food and Drug Administration. I testify today as a concerned physician who believes that the growing influence of the pharmaceutical industry on medical education is a long-term threat to the integrity of my chosen profession.

Before considering the many ways in which the pharmaceutical

Before considering the many ways in which the pharmaceutical industry is involved with the education of physicians, I would like to comment briefly on trends in medical education since the turn of the

century.

Today the education of medical students is under the control of universities and customarily consists of a 4-year curriculum, at the end of which the student receives his M.D. degree. A century ago, however, there were, in addition to university-based medical schools, a number of private trade schools training physicians. Because of the low professional competence of the graduates of these trade schools, the training of physicians became a national scandal early in the 1900's. After publication of the Flexner report in 1910, medical education came under the full control of universities; thus nearly every physician now in practice in this country was trained at a university as a medical student.

The second great advance in medical education in this century was the development of full-time faculties in medical schools. This has occurred as a result of our national investment in biomedical research and training since World War II. Today's medical student thus graduates with a rich and broad education in medical science after a 4-year exposure to university faculties dedicated to teaching, patient care, and medical research. In such an environment professional competence, commitment to scientific principles, and high personal standards are emphasized as the physician's primary and

necessary attributes.

After graduation from medical school, the modern physician then takes several additional years of training in a medical specialty or in family medicine. This training typically occurs in medical institutions, including university hospitals, military and Government hospitals, larger private hospitals, and some community hospitals. After such experience many physicians take advanced examinations, known as board examinations, to become certified as specialists. At this point the physician is probably as highly trained technically as he will ever be in his life, and he enters the practice of medicine, the product of an extended and expensive educational process.