course may enter. This final examination takes the form of a specialist thesis on a subject of experimental work or a survey of the literature in a particular field. It has to be defended before a jury made up of the director and the professors of the post-graduate school. Having successfully overcome this obstacle, the candidate receives a diploma which entitles him to the title of specialist in internal medicine.

One of the advantages of this system is the fact that the training course takes place in the eminently suitable environment of a university clinic, which is not only fully equipped with modern apparatus but has subdepartments of internal medicine, cardiology, chest diseases, nephrology, gastroenterology, radiology, histopathology, and so on. Thus in one university the trainee can acquire full and detailed knowledge of the various branches of internal medicine without wasting time. Further advantages are that the whole course is supervised by a single teacher, who is not only highly qualified but generally holds a university chair or is head of an institute, while the specialist curriculum is clearly defined and logically constructed right from the beginning of the course. On the other hand, the fact that training takes place in a single institute could restrict the future specialist's breadth of outlook. Moreover, this concentration limits the number of places on the course. A different type of set up might be able to offer more places as well as allowing a greater exchange of teachers and trainees between different institutes than is the case at present. Thus future specialists would be able to learn about the techniques used at other schools, and their particular points of view.

Disadvantages

Another disadvantage is that the curriculum includes many theoretical lectures, which may lead to an excessive reliance on this type of training at the expense of practical experience. Theoretical instruction and compulsory examinations do little to stimulate personal research and study, and a better system would be based on seminars with the active participation of the trainees and open discussions between them and their teachers. Nevertheless, the chief difficulty of teaching any specialty in Italy is that none of the work done by the trainees during their practical training is paid for. The trainees have to pay for their own specialist training—which may cost anything up to £1,000—a relatively large sum of money. To this figure must be added living expenses for the student away from home, for resident posts are few and far between.

Despite the existence of scholarships, undoubtedly this is an extremely heavy expense which cannot be born by most trainees. Thus one of the most serious consequences of our present system is that many young intelligent well-qualified doctors cannot take the course because they cannot afford it. Even more serious is the fact that the future specialist without financial means has to practise in some area of medicine in order to live—which clearly has a harmful effect on his education, since he is unable to pursue the course full time. One hopes that any reform of the system in Italy will take this important aspect into account.

The Netherlands

M. PLOOIJ

In the Netherlands undergraduate training in medicine is in the hands of the universities. The examinations are conducted internally, though the final examination ("arts-examen") is officially a state examination. On the other hand, specialist training in internal medicine is under the control of the Order of Physicians, the "Kloninklijke Nederlandsche Maatschappij tot Bevordering der Geneeskunst," and is controlled privately.

Up to now the student curriculum has been made up roughly of five years' lectures and two years of practical studies. After each of these stages there are two examinations—respectively, the so-called "doctoraal" (which literally means "someone able to defend a thesis," though this is not now required for students) and the final state examination ("arts examen"). Obtaining a higher thesis is not necessary to practise medicine. Nevertheless, because of the growing disbelief in the efficacy of lectures and the increasing value placed on early instructions at the bedside, attempts are now being made to curtail time spent in theoretical learning and to get the student into a hospital environment sooner. Owing to the ever-increasing number of students, non-university hospitals have been called on to play a part, and these have therefore been designated "institution hospitals" or teaching hospitals.

Preregistration Posts

After passing his final examination, the student is not entitled to practise but must obtain one year's practical experience. If he wishes to become a general practitioner he can take those posts which will have the most use for him, but if he wishes to specialize in internal medicine he can start specialist training straight away in hospitals.

As long ago as 1933 the Netherlands Order of Physicians founded a Commission for the Registration of Specialists. This Commission aimed at defining the needs of the different specialties and controlling the training of the individual prospective specialist, before they could be entered on to the specialist register. All this was organized privately without any interference from the State. Nevertheless, after the last war the Government and the faculties of medicine agreed that they could no longer stay outside the organization of specialist training and education. Thus in 1961 the Central College was created, in which the Government, the medical faculties, the Order of Physicians, and the hospital organizations are all represented. The primary aim of this Central College is to define the various teaching requirements for the different specialties.

At present the Commission for Specialist Registration has the duty of supervising the practical details of the training and education of prospective specialists, or assistants. As well as representatives from the Order of Physicians, the Commission contains representatives of the various specialist organizations—and, though officially the latter have no voting rights, in practice they play a useful part.

Specialist Training

Specialist training lasts for a definite period, and must be spent in recognized hospitals under a chief, who in turn must have been approved for training. Hospitals may be recognized for training for the full length of the training course, or for only part of this time, depending on the quality of the hospital, the number of specialist beds it contains, the opportunities for research, etc. If a hospital and a head of department (for example, a specialist in internal medicine) want to be authorized to train assistants, they must apply to the Commission for the Registration of Specialists. The latter forwards the application to the Concilium (the scientific council for the given specialty), which in its turn appoints two of its members to visit the hospital to

Andreas Ziekenhuis, Amsterdam, Netherlands
M. PLOOIJ, M.D., Director of Department of Internal Medicine

assess criteria such as the quality of the hospital, the chief of the particular specialty, the scientific standard, etc. After discussion the Concilium sends its conclusion and decision to the Commission. In this way a hospital can obtain the necessary authorization to train people in one or several specialties.

Generally, specialist training lasts five years. There is no final examination; as a rule the prospective specialist can be entered in the specialist register once he has completed this period. Obtaining a thesis is not necessary for specialist registration, and hence obviously the scrutiny of hospitals and the heads of departments of a specialty has to be very strict. Recognition of a head of a department, the department, and the hospital for the right to train specialists must imply a very high standard of theoretical and practical training.

Though in the Netherlands we have not finished discussing the problems of specialist training in general internal medicine, the number of doctors who are registered as specialists in this field has not yet begun to fall. Naturally we have a high regard for our colleagues specializing in cardiology, gastroenterology, thoracic disease, and so on. Nevertheless, we believe that one can practise general internal medicine and at the same time have a particular interest in one subject. This kind of practise can allow doctors to have a special interest and yet retain a broad outlook so that the unity of man is not threatened.

Continuing Education in Internal Medicine

Collaboration of Universities and Schools of Medicine

LORD ROSENHEIM

I shall assume that this topic refers to those who have completed their formal postgraduate education and who have, around the age of 35, been appointed as a consultant physician to a hospital. The general physician, or "internist", must thereafter keep abreast of advances in medicine for at least 30 years, a problem which most of us at this meeting have, I hope, successfully faced. During the years that I have practised as a general physician I have had to learn about and adjust my practice to the use of antibiotics, steriods, immunotherapy, chemotherapy, and renal dialysis and transplantation, to mention only a few of the outstanding advances.

It is only fairly recently that we have appreciated the great need for organizing the "continuing education" of the physician after he has finished his training, and more needs still to be done in supplying the necessary facilities. The provision of facilities will, however, be useless if there is not a great desire on the part of the individual physician to keep himself up to date. The first need is, of course, regular reading, of journals, books, and reports, and access to a good medical and reference library is essential. This may be the university library, a library run by the medical school and hospital, but will often be a library owned by a local medical society. As I expect most of you know, the best medical library in London, in the United Kingdom, is that of the Royal Society of Medicine.

With the rapid advances in therapeutics, regular information about new drugs, their uses and dangers, must be made available for all physicians. In Great Britain, as elsewhere, there is a growing tendency to the development of specialties in medical practice, but for a long time to come we shall need to produce a race of general physicians, though many of them will have a particular interest in some special subject. The full specialist is needed in the special centre, but general physicians with or without special interests will long be needed in all our hospitals.

It is not easy to maintain widespread general interest, and our purpose at this session is to review how this can best be done. The general physician may be on the staff of a university or teaching hospital, or of a peripheral non-teaching hospital. In each, continuing education results best from regular and close contact with colleagues and assistants, and from one's students. Discussions with assistants by the bedside, attendance at the weekly "grand round", at clinicopathological conferences, and other hospital activities keep the physician in touch with changing views. The professor of medicine has, perhaps, the simplest task of remaining a generalist, for he usually finds himself surrounded by young men who keep him up to date.

Role of University

The major role of the university in postgraduate education must lie in the training of physicians during the early years of their careers, in research laboratories and in the wards. The collaboration of the universities and medical schools in the continuing education of the general physician is largely informal. The academic staff of the school and the physicians on the staff of the teaching hospital spend an increasing amount of time on lecturing at postgraduate meetings.

In the United Kingdom there are now considerable opportunities for postgraduate study by established consultants. They may obtain study leave for several months, though regular sabbatical leave has not yet been organized by the National Health Service. The royal colleges of physicians, the universities, the Royal Society of Medicine, and regional postgraduate organizations hold regular meetings and conferences. The Association of Physicians of Great Britain and Ireland has long held its annual meeting in university centres, and regional associations have recently sprung up. On 8 and 9 May I attended the meeting of the Society of Physicians in Wales and listened to a series of excellent papers.

The Royal College of Physicians of London holds its annual advanced medicine conference in the college every February. This lasts for five days and includes discussions by experts on recent development in medicine, formal lectures, and also seminar sessions, where some ten physicians meet a specialist for informal discussion. Some 300 physicians attend each year and the proceedings are published as soon as possible after the meeting. The College also holds many shorter conferences on selected topics, at which the specialist is encouraged to explain advances in his subject in terms understandable by the generalist.

It is, I believe, easier for the specialist to keep up to date in his subject than it is for the general physician, but in both the main impetus for continuing education must lie within the individual. There can be no doubt that every physician benefits from a period away from his daily routine, and study leave, whether spent back at a teaching hospital or in travel

University College Hospital, London W.C.1
LORD ROSENHEIM, M.D., P.R.C.P., Professor of Medicine