to conferences or courses at home or abroad, gives him the much needed opportunity of refreshing his mind and adapting himself to advances in medicine. I hope that the European Association for Internal Medicine will provide just such facilities for the general physicians of Europe.

Collaboration of General Non-university Hospitals

H. DIRIART

The qualified specialist in internal medicine must maintain his knowledge at the level he reached when he specialized. This may be done by reading medical journals as well as regular attendance at his local hospital. Hence non-university hospitals have an important part to play in the continuing education of doctors, particularly since nowadays their facilities match the high standard of the doctors working in them. Moreover, the hospitals have had a considerable stimulus from the attachment of medical students to them for teaching, as well as from the building of medical postgraduate centres. It is important that the specialist in internal medicine should be integrated as much as possible into the hospital department and invited to participate fully in its work.

Postgraduate Medical Teaching Association, Paris

H. DIRIART, M.D., President

Continuing Education Outside the Hospital

R. SCHAUS

Even those with relatively easy access to hospitals and services cannot do without additional means of continuing education, such as reading medical journals. The choice of the other means depends on the preferences and geographical situation of the individual doctor. I shall now consider some of the really useful resources available in continuing education.

The medical lecture by an individual lecturer is still useful but its value is dwindling. Much more valuable are colloquia and round table conferences held with special speakers, which give the doctor a living refresher course on a specific subject. The advantage of direct contact lies in the dialogue which it allows and encourages.

We are all overwhelmed by the presentday proliferation of medical periodicals, and everybody must select his own special sieve through which essential papers will not pass. One solution might be for an association like ours to ask its members from various countries to draw up a list of the first-class journals in their countries, both in the field of general internal medicine and in related specialties. One can quote as an instance the booklet of the British Council on British medical periodicals.

It is also essential that every doctor should be able to obtain a bibliography on any given subject and in addition the articles

he needs, whether as microfilms, photostats, or any other means of reproduction. Such an ideal service is offered by the Royal Society of Medicine to its members.

Self-assessment

Subjects which a doctor studies of his own free will are not always the same as those in which there are particularly large gaps in his knowledge. So the tendency has grown up to study what areas the doctor knows particularly well, which gaps should be filled, and at the same time to provide a means of filling them. The American College of Physicians took the initiative in this field in 1968 and also in 1971, when it sent out a document containing 100 questions to specialists in internal medicine in the U.S.A. After it had been corrected this questionnaire was returned again to the specialist (in confidence) telling him of the results and suggesting a possible bibliography for study. Since then, this type of experiment has been used more and more on the other side of the Atlantic.

This "self assessment of medical knowledge" may be achieved by other means. Examples include the *Textbook Study Guide of Internal Medicine*, with its 2,265 questions and answers, which is published in the U.S.A; multiple-choice questions in medical journals, with the answers published in the next issue; and collections in book form of, for instance, electrocardiograms with multiple-choice answers, the answers being printed at the end of the volume. Another technique in this field is programmed learning, which allows instruction to be geared to the individual. This system allows the reader to consolidate his knowledge or to acquire new facts.

Slides

Slides have now become an essential part of any lecture, but they may be used for teaching in another way—that is as a collection of illustrations relating to a particular topic. Thus, the College of Medicine of the Paris Hospitals has collected together an outstanding photograph library, where each set of colour slides is accompanied by a printed commentary, which is read out to the audience as the slides are projected. Obviously some subjects (such as endoscopy and radiology) lend themselves much better to this type of teaching than do others. Another possible way of using slides is to combine a set of them with a tape recording, so that they are projected with a synchronized commentary.

Radio and Sound Recordings

Radio has been used much less in medical teaching than in other fields. The School of Medicine of New South Wales in Australia, broadcasts programmes of continuing medical education three times every week. These last one hour and use a special wavelength, which can be received only by specially adapted receivers.

The telephone has been found useful for consultations with specialists or research workers over immediate specific problems, but so far experiments using it for actual teaching suggest that its value is negligible.

At the moment sound recordings are dominated by magnetic tapes, which have been widely used for some time. Tapes have many advantages. They can be recorded anywhere, edited, mass produced, and posted quickly. The doctor can listen to them anywhere and at any time. I personally have been very impressed by a regularly appearing internal medicine periodical in sound. These are cassettes playing for an hour and are published by the California Medical Association 24 times a year. Similarly, every

Institute of the Grand Duchy of Luxembourg

R. SCHAUS, M.D., President of the Faculty of Medical Sciences