

of the Medical School and of the teaching hospitals, but it is still impossible to say when a start will be made. It is expected that Sheffield, with the sympathy of the city and other bodies concerned, will establish a whole-time chair of social and industrial medicine in the near future. Co-operation between city and university in another sphere has resulted in the establishment of a university department of forensic medicine, under the charge of Dr. Gilbert Forbes, police surgeon to the city, with the title of part-time senior lecturer. The establishment of full-time chairs of obstetrics and gynaecology and of psychiatry is in contemplation. Developments in the hospital sphere of interest in Sheffield, though not directly concerning the university, include the appointment of a clinical artist, the establishment of a department of medical photography, and the intended opening during the next year of a school of physiotherapy.

At Birmingham, where the difficulties caused by doubling the entry of students have proved formidable, considerable progress has nevertheless been made with the new developments in the Medical School. A second chair of anatomy has been created, and a further innovation has been made by the appointment of two professors of pathology—one in experimental pathology and the other in morbid anatomy. The first chair of anatomy and the chairs of physiology and medicine have been named after former distinguished members of the Medical School—Sands Cox, Bowman, and William Withering respectively. Following the practice of the older universities, whereby an outstanding individual is elected to a chair specially created for him, part-time professorships have been created in therapeutics and gastro-enterology, the latter the only one of its kind in the British Isles.

The regulations for higher degrees (M.D. and Ch.M.) at Birmingham have been amended, and the main emphasis will in future be on a thesis based either on original research or on the application of scientific methods to medicine or surgery. The regulations for the award of the M.D. degree in State medicine have been withdrawn and the degree abolished. The regulations for the degree of Ph.D. of the Faculty of Medicine have also been amended. Lectureships in operative surgery, vaccination, and applied anatomy have been abolished. The course in the last subject is to be under the direction of the department of anatomy in collaboration with the head of the clinical departments.

Under the National Health Act a "teaching hospital" has been formed in Birmingham and includes the names of those hospitals at which the teaching of dentistry and the four major subjects of the curriculum has up to now been carried out. This "teaching hospital" will be administered by a board of governors, on which there will be a strong university representation.

In the Welsh National School of Medicine the inclusion in the teaching group at Cardiff of the former municipal hospital at Llandough will help so far as the clinical period is concerned. As a long-term policy, plans are being prepared for a 1,000-bed teaching hospital, together with a new medical school.

POSTGRADUATE TRAINING FACILITIES

THE LONDON SCHOOL AND INSTITUTES

The British Postgraduate Medical Federation, to whose Director, Sir Francis Fraser, we are indebted for up-to-date information, is now a school of the University of London, and the Postgraduate Medical School at Hammersmith and the Institute of Psychiatry have been recognized by the University as federated institutes. A number of the other institutes in London await inspection by the Senate before they also receive similar status. All the institutes now provide clinical instruction of a high standard, though some of them, owing to lack of accommodation, are unable as yet to provide the facilities for research necessary for them to give education of advanced university level.

Last year advantage was taken of clinical facilities at certain municipal hospitals. This arrangement has now ceased, but the Central Office of the Federation hopes to make direct use not only of these hospitals but also of many others under the Regional Boards for the postgraduate education both of specialists and of general practitioners. For this purpose a

Regional Adviser in postgraduate medical education is being appointed by the Federation, on behalf of the University, to each of the four metropolitan regions. Three of these posts have already been filled; no appointment has yet been made to the north-western region.

The duties of these regional advisers will be to carry out the policy of the University and the Federation in arranging postgraduate education; to act as liaison between practitioners in the region, the medical schools and teaching hospitals, the regional board, and the hospital management committees; to assist the undergraduate schools in finding for their graduates suitable house-officer appointments in non-teaching hospitals; to assist all medical schools in finding for postgraduates suitable appointments in non-teaching hospitals; and to arrange for general practitioners and public health officers of the region clinical assistantships in near-by hospital centres, regular clinical meetings, short courses, and longer or more intensive general refresher courses.

It is planned, by the way, to organize refresher courses on the same lines as in the past for general practitioners. Financial assistance was given to insurance practitioners on certain conditions in respect of their attendance at specially arranged courses. The Ministry of Health is now drawing up regulations which are expected to include grants for National Health Service practitioners. The Act provides that the Minister may enter into arrangements with universities and schools for the provision of courses which practitioners may attend, and may make payments towards the cost of providing such courses and the expenses of practitioners attending them.

The Federation and the three Royal Colleges in London have set up a joint board to effect co-operation in providing for postgraduates and to prevent overlapping. Sir John Anderson has agreed to be chairman, and the board will consist of two representatives of each of the Royal Colleges and of the governing body of the Federation. Among the matters to which the joint board will give its attention will be:

- (1) Provision of advanced courses in the basic sciences.
- (2) Opportunities for intending specialists to supplement responsible hospital appointments and practical clinical work by courses of lectures and demonstrations, etc.
- (3) Access to clinical material for those attending lectures and demonstrations.
- (4) Revision courses for established specialists.
- (5) Postgraduate training in special subjects for graduates other than those intending to specialize in those subjects.
- (6) Co-ordination of lecture provision.
- (7) Procedure for enabling selected graduates from overseas to obtain suitable hospital appointments.
- (8) Expert advice and guidance for graduates seeking education and training in the specialties.

The address of the Federation is 2, Gordon Square, W.C.1.

The Hammersmith School

For the following notes on the Postgraduate Medical School, Ducane Road, Shepherd's Bush, which is an institute of the Federation and has been a school of the University of London since its inception in 1935, we are indebted to Dr. Charles Newman, the Dean.

The teaching in the clinical departments consists of bedside teaching, reinforced with lectures, clinico-pathological conferences, radiological and post-mortem demonstrations, and attendance at operations. The full programme of organized teaching is carried on in ten-week periods, corresponding to the University of London terms. During the vacations the staff is engaged in research work and the higher education of selected students, but organized teaching ceases, and other arrangements are made for those students who are not selected to remain at the school. Short-term students desiring two or more terms of concentrated instruction are therefore advised to book in October or January so as to avoid including the long vacation in their stay. House appointments are usually made from among students, and facilities are provided for senior students who wish to carry out original research under the Director.

About 60 students can be accommodated in the department of medicine, and resident appointments are available for about 20. A similar number can also be accommodated in the department of surgery, which provides training for general surgeons, but instruction in orthopaedics, otolaryngology, and urology is included. Teaching is so organized as to be continued from

out-patient departments through the wards and operating theatres to follow-up clinics. Students do not themselves perform operations. There are at present no facilities for work in preparation for the primary F.R.C.S. examination.

The department of obstetrics and gynaecology is now joined with the combined school of Queen Charlotte's and Chelsea Hospitals to form a provisional Institute of Obstetrics and Gynaecology. It is therefore able to provide students with an increase in teaching facilities. The department at the Postgraduate School provides teaching in the antenatal and post-natal clinics and in the sterility clinic, as well as in the wards and operating theatres, and, in addition, lectures and conferences in term time. The department at Queen Charlotte's provides full scope for teaching in obstetrics, and the department at Chelsea provides more extensive teaching in gynaecology and gynaecological endocrinology than has hitherto been possible at this school.

The department of pathology is organized in four main sections: (1) morbid anatomy and histology, (2) bacteriology, (3) haematology and clinical pathology, and (4) biochemistry; and instruction is adapted to the requirements of the course for the diploma in clinical pathology of the University of London. The course lasts for one year, starting in October. There are twenty places available in this course, and selection from them is made in June. Fortnightly and six-monthly courses in practical anaesthetics are also given. In the department of radiology teaching is based on the requirements for the diploma in medical radiology.

The Specialist Institutes

The Institute of Cardiology (National Heart Hospital, Westmoreland Street, W.1).—Six appointments of registrar type are available per annum for physicians in training as cardiologists. Training includes clinical cardiology, radiology of the heart, electrocardiography, and research. General physicians may enrol for full- or part-time instruction for one term of approximately three months. There are three terms annually, starting in January, May, and October.

The Institute of Child Health (Hospital for Sick Children, Great Ormond Street, W.C.1, and Hammersmith Hospital).—Teaching in every aspect of child health is provided, including instruction on the newborn and premature infant. Three terms each of three months' duration, starting in January, May, and September.

The Institute of Dermatology (St. John's Hospital for Diseases of the Skin).—Clinical teaching in out-patient department twice daily, also facilities for study and tuition in the pathological laboratory.

The Institute of Diseases of the Chest (Brompton Hospital).—Teaching primarily by means of hospital practice; students enrolling for three months or more in approximately a half-time course of instruction.

The Institute of Laryngology and Otolaryngology (Royal National Throat, Nose, and Ear Hospital, Gray's Inn Road, and Golden Square, W.C.1).—A comprehensive full-time course lasting 20 weeks and designed to cover the whole field of the specialty is held twice a year, starting in January and July. A part-time advanced revision course, lasting for ten to twelve weeks, suitable for students preparing for the higher qualifications, is held twice yearly approximately from February to May and from September to November.

The Institute of Neurology (National Hospital for Nervous Diseases, Queen Square, W.C.1).—The teaching is mainly by attendance on the hospital practice, and there are three terms annually. More advanced students are appointed as clinical clerks in the wards or attached to special departments and the research laboratories. In addition to this, two ten-week courses, which are whole-time, are held in the autumn and spring terms.

The Institute of Ophthalmology (Moorfields, Westminster, and Central Eye Hospitals).—In addition to the teaching by means of hospital practice, a routine lecture and tutorial course, lasting four or five months, is held twice a year, beginning in March and October. Part I consists of anatomy, embryology, histology, physiology, optics, and elementary clinical instruction. Part II comprises bacteriology, pathology, operative surgery, medical ophthalmology, and all aspects of ophthalmic disease.

The Institute of Orthopaedics (Royal National Orthopaedic Hospital, Great Portland Street, W.1).—The practice of both the central hospital and the country branch at Stanmore is open to postgraduate students. In addition to the hospital practice a comprehensive basic course of six months' duration consisting of lectures and demonstrations begins in October.

The Institute of Psychiatry (Maudsley Hospital, Denmark Hill, S.E.5).—Training normally covers a period of two to three years after adequate experience elsewhere in general medicine, and is based on responsible hospital duties under supervision. Regular series of lectures and demonstrations by experts in various fields relevant to psychiatry are given throughout each of the university terms.

The Institute of Urology (St. Peter's and St. Paul's Hospitals, Henrietta Street, W.C.2).—Three courses of fourteen weeks' duration are held annually, beginning in January, April, and September. These include systematic lectures covering the whole subject of urology, out-patient sessions, ward visits, operation sessions, and tutorial demonstrations.

An Institute of Dental Surgery, a dental counterpart to the Institutes of Child Health, etc., has just been set up at the Eastman Clinic. As already noted, an Institute of Obstetrics and Gynaecology is now being formed, combining the department at the Postgraduate Medical School and the combined School of Queen Charlotte's and Chelsea Hospitals. It will start work as an Institute next month.

Facilities in Other University Centres

The following is a not exhaustive list of courses of postgraduate instruction held regularly at universities other than London. All are full-time courses, except those of neurology at Birmingham, psychiatry at Manchester, and the 12-months course for the D.P.H. in the University of Wales, which are part-time.

Subject	University	Duration	Starts
Anaesthetics	Bristol	2 weeks	April and Oct.
	Oxford	2 "	Mar. and Sept.
Bacteriology	Manchester	9 months	Oct.
	Birmingham	4 weeks	Each univ. term
Industrial health	Edinburgh	9 months	Oct.
	Glasgow	9 "	"
	Manchester	9 "	"
	Edinburgh	12 weeks	April and Oct.
	Glasgow	8 "	"
Medicine (general)	Edinburgh	2 months	Continuous during univ. terms
	Birmingham	2 "	May and Nov.
Obstetrics and gynaecology	Birmingham	6 months	Jan. and July
	Liverpool	15 "	Oct.
Ophthalmology	Bristol	5 "	Sept.
Orthopaedic surgery	Bristol	10 weeks	"
	Edinburgh	5 "	Oct.
Physical medicine	Leeds	3 terms	"
	Aberdeen	9 months	"
	Birmingham	9 "	"
	Bristol	9 "	"
	Durham	9 "	"
	Edinburgh	9 "	"
	Glasgow	9 "	"
	Leeds	9 "	"
	Liverpool	9 "	"
	Manchester	9 "	"
	St. Andrews	9 "	"
	Wales*	3 "	"
Psychiatry	Edinburgh	12 "	Jan.
	Leeds	18 "	Oct. (alternate years)
	Aberdeen	18 "	Oct.
	Birmingham	18 "	"
	Bristol	18 "	"
	Durham	18 "	"
	Edinburgh	18 "	"
	Glasgow	18 "	April and Oct.
	Liverpool	2 years	Oct.
	Manchester	18 months	April
Radiodiagnosis	Sheffield	18 "	Oct.
	Wales	18 "	"
	Birmingham	2 years	Oct. (alternate years)
	Bristol	2 "	Oct.
	Edinburgh	2 "	"
	Glasgow	2 "	April and Oct.
Radiotherapy	Liverpool	2 "	Oct.
	Manchester	2 "	April
	Sheffield	2 "	Oct.
	Edinburgh	5 months	Mar. and Oct.
	Glasgow	8 weeks	April and Oct.
	Liverpool	9 months	Oct.
Surgery (general)	Edinburgh	2 terms	"
	Liverpool	4 months	Jan. and Sept.
Tropical medicine	Wales	6 "	Jan.

* For C.P.H. (Wales), preliminary to D.P.H.

Other Postgraduate Arrangements

The West London Hospital Medical School, which during the past eleven years has accepted undergraduate students for the clinical part of the medical curriculum, is now, after

prolonged negotiation with the University of London, shortly to join the British Postgraduate Federation, in which its future work will be the training of specialists in general medicine and general surgery. With this in view the hospital has been grouped with the Hammersmith and St. Mark's Hospitals as one of the designated teaching hospitals under the National Health Service Act. For the time being the West London Hospital Medical School and the British Postgraduate Medical School will operate independently, but the West London will not accept any undergraduate students after October. So far as can be foreseen, it will be possible to admit a small number of postgraduate students in the summer of 1949 and to replace an undergraduate by a postgraduate community entirely by 1952.

At Cambridge the School of Postgraduate Teaching and Clinical Research is well on its way. A successful innovation has been the establishment of trainee posts in the clinical pathology department of Addenbrooke's Hospital. These posts, which carry a "living wage," offer two years' training in all aspects of clinical pathology, post-mortem work, histology, and chemical pathology.

Postgraduate teaching in the University of Liverpool offers full-time courses for the degrees of Ch.M., M.Ch.Orth., and M.Rad., granted by the University, and for the diplomas of D.P.H. and D.T.M.&H., the latter in conjunction with the Liverpool School of Tropical Medicine. These courses are also suitable for candidates studying for the F.R.C.S. and D.M.R.E. examinations. There is a new full-time course in anaesthesia, lasting one year, commencing in October, and a course throughout the academic year for postgraduate students proceeding to the degree of M.D., which is usually attended by candidates for the M.R.C.P. A part-time course of obstetrics and gynaecology is held throughout the academic year, beginning in October, and a short intensive course in paediatrics lasting three weeks and suitable for candidates studying for the Diploma in Child Health is held once or twice a year. The course in radio-diagnosis lasts two years, not eighteen months as formerly.

At Leeds a feature of postgraduate work is weekly clinical meetings for general practitioners and clinical week-ends at intervals on special subjects. A 14-days refresher course for general practitioners is planned. A postgraduate committee is in charge of these activities and of the Ministry of Health scheme for demobilized medical officers. Middlesex Hospital, London, holds one course a year for the primary Fellowship examination of the Royal College of Surgeons. It also provides special courses for graduates for the diplomas in medical radiology, both diagnostic and therapeutic.

The Faculty of Radiologists (45, Lincoln's Inn Fields, W.C.2) offers a Fellowship (F.F.R.) to medical graduates of five years' standing who have spent at least one year in general clinical work at an approved hospital, hold a radiological diploma, and have practised radiology exclusively for at least two years subsequent to obtaining that diploma. Candidates are required to pass an examination and submit a thesis. Those holding higher qualifications may be exempted from examinations in general medicine, surgery, or pathology. Full particulars may be obtained from the Warden.

Apart from London, Edinburgh has probably more postgraduate courses than any other centre. These include general medicine and surgery, industrial health, psychiatry, etc. Particulars from the Director, Postgraduate Board for Medicine, Edinburgh. In Dublin, with the co-operation of the ten teaching hospitals, the Royal College of Surgeons in Ireland has arranged a postgraduate course in surgery.

The Royal Colleges

The Royal College of Physicians of London holds a series of lectures for postgraduates on advanced clinical subjects. The lecturers are specially distinguished in their respective fields, and are drawn from the provinces as well as London. The audience for these lectures, which are given four times a week and will be continued apart from vacations, is limited to 200. A short full-time intensive course in paediatrics is also given. Details can be obtained from the Registrar of the Royal College, Pall Mall East, S.W.1.

The Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.2) has instituted a number of postgraduate courses in various subjects—surgery, anaesthetics, dental surgery and

anatomy, applied physiology, and pathology. The programme of lectures on general, oral, and dental surgery includes 34 during the month of September alone. Lectures on surgery to be delivered at the College during October number 12, each by a different lecturer. In the same month 45 lectures on anaesthetics are to be given—three daily—and a series of tutorials in anaesthetics will be held during the same period. From October to December 72 lectures in anatomy, applied physiology, pathology, and pharmacology have been arranged. From January, 1949, there will be residential accommodation available within the College for postgraduate students. Many lectures are also given at the other Royal Colleges and Corporations.

The Royal Cancer Hospital (Free) (Fulham Road, S.W.3) offers facilities to postgraduates for the study of cancer. Courses of instruction extending over a period of two years are given for candidates preparing for the diploma in medical radiology. In addition short courses of instruction are given in radiotherapy extending over periods from two weeks to two months. Facilities are offered to postgraduates to attend the out-patient department, wards, and operation theatres; courses of lectures in the diagnosis and treatment of cancer are also arranged. Appointments as honorary clinical assistant are available for suitable candidates. Courses of instruction are given in clinical and operative surgery for postgraduates preparing for the final F.R.C.S. examination. The department of pathology participates in this course and also in the course of the D.M.R. examinations, and individual postgraduates are accepted, when possible, for special tuition and research work. The Chester Beatty Research Institute is exclusively devoted to experimental investigations on cancer, and facilities are provided for suitably qualified workers studying for a higher degree.

At Middlesex Hospital special courses are provided for graduates for the diplomas in medical radiology, both diagnostic and therapeutic. One course a year is held for the primary F.R.C.S. examination.

For many years the Fellowship of Postgraduate Medicine (1, Wimpole Street, W.1) has administered a bureau providing general information on postgraduate work and arranging courses of instruction at hospitals. Practitioners from overseas visiting London can be advised as to postgraduate facilities by the Empire Medical Advisory Bureau, recently set up by the B.M.A. at Tavistock Square.

ENTRANCE INTO MEDICAL TRAINING

Students' Registration

Every candidate for registration as a medical student must, by regulation of the General Medical Council, produce evidence that he has attained the age of 17 and has passed an approved examination in general education and, in addition, an examination in elementary physics or chemistry conducted or recognized by one of the licensing bodies. He is required to have passed in English, a language other than English, elementary mathematics, and an additional subject or subjects, such as history, geography, physical science, natural science, and Latin or some other language recognized by the university for the purpose. Subject to this condition, the General Medical Council recognizes responsions of Oxford University, the previous examination of Cambridge, the matriculation examinations of other universities of England and Wales, and the equivalent examinations of the Scottish and Irish universities, also all examinations accepted by one or more of the universities or other bodies as equivalent, for the purpose of entrance or matriculation, to their own. These include the school and higher school certificate examinations of the Oxford Delegacy for local examinations, the Cambridge local examinations, the examinations of other universities, and the leaving certificate examination of the Scottish Education Department. The examinations of Colonial universities which are similarly accepted by one or more British universities for the purpose of matriculation will also be recognized. The final examinations for degrees in art and science of any home or Dominion university are also recognized.

Deferment

The Ministry of Labour and National Service has directed that preference for admission to medical schools should be