

## DEPARTMENT OF HUMAN ANATOMY, OXFORD: NEW BUILDINGS

THE time devoted by medical students to the meticulous dissection of cadavers and the memorizing of a mass of anatomical detail has diminished considerably in Great Britain during the past half-century. It is now recognized that an encyclopædic knowledge of topographical anatomy is devoid of educational value and its practical application is restricted to surgical specialists and a few selected research workers. By contrast, a knowledge of the structure and functional role of the tissues which go to make up the body in subjects of all ages, of their reactions to stress, and to the wear and tear of everyday life, is acknowledged to be of both educational and practical value to physicians, surgeons, general practitioners and research workers alike.

This re-orientation in the role of anatomy as an academic discipline in Britain owes more to Sir Wilfrid le Gros Clark than to any other anatomist. F. P. Mall pioneered a similar movement at Johns Hopkins University in the United States of America in the early 1900's which was quickly accepted and exploited by such eminent scientists as George Corner, Herbert Evans and George Wislocki. Now, however, there is a tendency in the United States to regard anatomy as a part of biology almost divorced from medicine, and to appoint more and more teachers

who have not had a medical training. The opening of the new Department of Anatomy in the University of Oxford (Fig. 1) is a milestone in the history of a reformation in England which has proceeded more slowly and which seeks to avoid this tendency.

Sir Wilfrid's genius has been to gather around him, and provide facilities for, people interested primarily in the changes which occur in the tissues of the human body in health and in response to trauma (and selected diseases) from conception to death from old age. This is not to say that experimental work on lower animals is not carried out in his Department; indeed, it is, but that, under his leadership, teaching and research are directed more towards the biology of man than of other animals. Sir Wilfrid has contrived to allow anatomy to evolve rather than denying it a place as an academic discipline or allowing it to become a home of lost biological causes. This he has achieved through his unique distinction both as an outstanding experimental neurologist and as an outstanding authority on primate anthropology which, incidentally, he regards as a hobby.

The subjects most strongly represented in the new Department are neuroanatomy, with special reference to vision, olfaction and common sensation. Modern methods of microscopy, including electron, reflecting, phase contrast and interference techniques, are also



Fig. 1. New Department of Human Anatomy, Oxford

under active investigation. They are housed in special rooms in the basement of the building and are being used, among other things, to obtain quantitative data concerning the anatomy of individual living cells. The mechanics of muscular activity in man and in experimental animals are also being studied by a number of different methods, including strain gauge techniques and electromyography. Physical anthropology is also strongly represented and intensive work is being carried out on the adaptation of human subjects of different age and race to extremes of environmental temperature.

The old department has been entirely transformed from a mushroom growth of ill-suited, over-crowded research rooms, leading off from an old-fashioned dissecting room and a small museum, to a modern research laboratory adaptable to any field of biological study.

The essential features of the new Department are an extremely well lit, adequately ventilated and conveniently proportioned dissecting room. This can also be used for the study of surface and functional anatomy. It surmounts a large, well-equipped histological laboratory which in turn surmounts a basement containing an up-to-date embalming room, body store, and a room in which recently deceased persons can be viewed by relatives should the necessity arise. Close to this unit are a conventional lecture theatre, a small demonstration theatre and a departmental library. Beyond these is a commodious museum which can also be used as a study and reading room. This has evolved from the former dissecting room by a process of adaptation and the skilful use of modern methods to improve the interior décor of the old structure. Lying between the museum and the new dissecting room are the laboratories and offices occupied by the staff.

The staff includes a professor, two readers and four University demonstrators, each of whom devotes his time to a particular branch of anatomy, assisted by departmental demonstrators and postgraduate students reading for higher degrees. A few rooms which serve as combined laboratories and offices have been set aside for the use of temporary visitors from overseas. Housed and integrated with the rest of the Department is a Medical Research Council climatic and working efficiency unit which possesses an up-to-date climatic chamber. The Department also has a large well-equipped workshop for handling metal, plastics and wood, as well as a smaller instrument workshop. It also contains a large well-designed photographic department containing the most modern equipment which is capable of handling every kind of photographic problem. The animal house and operating theatre are on the roof of the building and conform to the highest modern standards. The individual research laboratories are simple yet quickly adaptable to different kinds of biological research with the minimum of expense. In particular, they are well lit and ventilated, and provided with a service panel encircling the room, having gas, electrical (direct and alternating current) and compressed-air outlets at intervals. The rooms are also provided with sinks having hot and cold water supplies. Three of the rooms contain, in addition, fume cupboards, and two rooms have voltage-stabilized alternating-current electrical outlets and dark-room blackout blinds. There is also a small light- and sound-proof room. The majority of the benches in these rooms



Fig. 2. Bust by Sir Jacob Epstein of Sir Wilfrid le Gros Clark

are movable but strong, rigid, relatively light and fitted with plastic tops. They have been supplied in two standard heights, lengths and widths, and they can be fitted adjacent to the walls beneath the service panel. They can thus be moved from room to room according to requirements. A variety of units in two sizes containing drawers and/or cupboards have been provided for fitting beneath the benches. These can also be moved from room to room to suit particular requirements. These research rooms can therefore be adapted to serve such diverse techniques as standard histology, tissue culture, biochemistry and biophysics. An adequate number of lavatories, wash basins, locker and store rooms have also been provided.

Sir Wilfrid's friends and colleagues have recognized that his genius has set him among the immortals. But as the regius professor of medicine at Oxford, Sir George Pickering, said when he opened the new building on March 16: "Immortality as is commonly conceived is relative rather than absolute and, since what is generously called the growth of scientific literature, may obscure masterpieces like le Gros Clark's writing, his friends thought it right to secure his more permanent immortality by asking Sir Jacob Epstein to create a portrait bust". The opening of the new Department comes just twenty-five years after Sir Wilfrid was appointed Dr. Lee's professor of anatomy and Fellow of Hertford College in the University of Oxford. It is therefore very fitting that a work of this kind should have been commissioned from a great sculptor in honour of Sir Wilfrid, to be permanently housed in the Department which his vision has done so much to create.

The bronze portrait bust of Sir Wilfrid le Gros Clark is sited in the entrance hall of the new building in a quiet and dignified setting but where it can be seen and examined for the work of art which it is (Fig. 2).

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