Fig. 1. View of the Wilmslow Road frontage, oldest to far right, newest to far left. When the Christie Hospital and Holt Radium Institute, both devoted to the treatment of cancer, moved in 1932 from the centre of Manchester to the suburb of Withington, the Hospital Director, Dr. Ralston Paterson, wanted to found a research unit, which he did, with the assistance of his wife, Edith, who doubled as radiotherapist and radiobiologist, and Dr. Walter Dale, a biochemist specialising in radiation chemistry. After the Second World War, temporary buildings were provided to house sections of Radiation Chemistry, Experimental Chemotherapy, Radiobiology and Cytogenetics. Physics occupied Walton House, an old mansion. Edith Paterson’s laboratory of Experimental Haematology was the only one on the hospital side of Wilmslow Road, perched over the archway entrance to Nathan House, the private wing of Christie Hospital.
Fig. 2. The linear accelerator, housed in the basement.

Fig. 3. A view of the Immunology Section, opened 1977.
This is just out of sight round the bend to the right, as shown in figure 1. This unit was the nucleus for the 3 successive phases by which the laboratories expanded, beginning in 1962, when the Patersons retired giving their name to the laboratories and Professor Laszlo Lajtha was appointed the first full-time Director of Research.

The 3 phases are visible in the photograph (fig. 3) from right to left in sequence, the third being built in 1977. As the laboratories expanded, room for new sections of Carcinogenesis, Epithelial Kinetics, Cellular Biophysics and Immunology were created. The laboratories also house Professor Crowther’s Department of Medical Oncology and separate units of Pediatric Oncology, Pharmacokinetics and Endocrinology.

The windowless ground floor level of the 1977 building is the service area for the linear accelerator housed in the basement. Its ‘portrait’ is in figure 2. The electrons are generated at the far end and accelerated along the narrow tube seen in the centre of this view to hit the target housed at the right. The highspeed electrons (12 MeV) are produced in pulses whose length and frequency are under the operator’s control, in the ranges of 5 nsec-5 , usec long and single pulses to 50 Hz. Single pulses can be used for pulse radiolysis of samples of biological interest.

The view of the Immunology Laboratory is typical of the 1977 laboratory lay-out (fig. 3). Professor Lajtha, the first and present Director of the Paterson Laboratories, was born in Budapest 58 years ago. He came to Britain in 1947 to become Head of the Radiobiology Laboratory at the Churchill Hospital, Oxford, where his speciality was Experimental Haematology, which has continued to be his main research interest in Manchester. In 1970 he was appointed to the newly created chair of Experimental Oncology of the University of Manchester.

The laboratories are a multidisciplinary establishment, for research into cancer from any angle, including origins and treatment, with participation in clinical research which is primarily undertaken by Professor Crowther of the Department of Medical Oncology in the same building, with the collaboration of the hospital complex.

Examples of the current lines of research are: The effects of ionising radiation and chemotherapeutic agents on molecules, chromosomes, cells, tumours and whole animals. Investigation of the properties of tumour cells, from the viewpoints of diagnosis and therapy. Interaction of carcinogens with cell components, including DNA. Control of haemopoietic and epithelial systems. Study of immune systems with the objective of their use in tumour therapy. From the small staff in 1932, the laboratories have grown until they now employ 42 post-doctoral staff, 20 postgraduate students, a third of whom achieve a Manchester PhD degree each year, and half a dozen Visiting Fellows each year from all over the globe. There are an additional 74 technical and 13 clerical staff.

The funds are provided jointly by the Cancer Research Campaign, the Medical Research Council and the National Health Service. A local charity, the Women’s Trust Fund provided finance for new buildings.