Curie Hospital surveys its results in the management of carcinoma of the uterine cervix treated by a variety of combinations of surgery and irradiation; unfortunately the presentation is far from clear.

Bloch has shown that under mild hypothermia (30°–33° C) in men there is an increase in sensitivity of cerebral tissue to irradiation, that tumour tissue shows a relatively greater sensitivity than normal brain tissue but that life is not prolonged by adding hypothermia to irradiation in the management of brain tumours (to which can be added the fact that the results of treatment of the gliomata—primary malignant tumours arising in brain from neuroglia—except in the relatively uncommon type which can be removed surgically at the expense of a cerebellar hemisphere—are very poor).

St. George's Hospital provides a very detailed review of tumours arising from the acoustic (8th cranial) nerve. These are histologically benign tumours of the nerve sheath cells and in general are called 'neurilemmomas' or 'schwannoma'. Such tumours can affect any nerve in the body, but the 8th nerve is a site of predilection. Although this tumour is histologically benign, it has been held responsible for the death of 107 of a series of 280 cases in which it was known to be present. The tumour occurs in a notoriously inaccessible site within the skull, is hazardous to remove and virtually radioresistant.

P. ALEXANDER
I. HIEGER
A. L. LEVENE

OBITUARIES

Prof. V. A. Bailey

It may be said that Prof. Victor Albert Bailey, who died on December 7, 1964, was one of a decreasing number of physicists who lived and worked through what is now thought of as the 'heroic era' in physics.

He had the good fortune to be associated at an early age of his life with Sir John Townsend and his school in Oxford. Townsend soon discovered in his young associate a remarkable combination of mathematical facility and experimental skill. Much of the classical work on the electrical breakdown of gases was published conjointly by Townsend and Bailey.

When he accepted a chair of physics in the University of Sydney in 1924 (in 1936 this became the chair of experimental physics), Bailey immediately established a research school engaged in the elucidation of various phenomena occurring in ionized gases and other ionized media such as the upper atmosphere. Although a large number of publications arose from this work, Prof. Bailey will probably be best remembered for the elucidation of an effect observed by early wireless operators and sometimes referred to as the 'Luxemburg effect'. Briefly, it was observed that the station *Radio Luxemburg* could also be received on neighbouring frequencies but only under certain rather puzzling conditions. Bailey showed by theoretical calculations and experiments that radio waves can interfere with each other when passing through a medium such as the ionosphere, that is, they can impress their modulation eventually on to each other. In addition he showed that the effect would be considerably increased if the 'disturbing' transmitter should happen to be tuned to the so-called 'gyro-frequency' which depends on the strength of the Earth's magnetic field at the point of interference of the two waves. This gyro-magnetic resonance has long since been confirmed experimentally and developed into a standard method of investigating the properties of the ionosphere.

During the Second World War the Australian Government entrusted Prof. Bailey with the task of forming, within the University of Sydney, a school of basic scientific instruction in radar techniques for officers of the Australian armed forces. From this school several hundred graduates emerged, some of them taking regular science courses after the War. This shows that at that stage Prof. Bailey's scientific reputation was already looked on as unquestionable.

After the War he returned again to the subject of wave propagation in ionized media, taking into account more and more of the numerous variables involved in these modes of propagation, such as the relativistic motion of the charge carriers. Some of this work is considered classical in the field that is now called 'plasma physics'.

After his retirement in 1960, Prof. Bailey turned his attention to cosmology and in particular investigated the

possibility that some of the celestial bodies such as the Sun may carry permanent electrical charges of considerable magnitude. He read three papers on the subject just recently at the Galileo celebration convention in Rome. He intended to continue this work, and in fact had accepted the offer of a visiting professorship in the Department of Space Science and Applied Physics of the Catholic University of America, in Washington, D.C., for February 1965.

His death will be mourned by the great number of his colleagues, students and friends all over the world.

KURT LANDECKER

Prof. Umberto D'Ancona

It is with very great regret that biologists learnt of the sudden death of Prof. Umberto D'Ancona on August 24. Only in the previous month he had been taking active and far-sighted part at the meeting of the International Union of Biological Sciences at Prague, and at the subsequent meeting on the International Biological Programme at Paris, where his wisdom and wide biological outlook seemed destined to exert an important influence on the future development of that Programme.

He was an outstanding example of that handful of biologists who carried and adapted the traditions of nineteenth-century evolutionary biology to the wider and very different outlook of to-day.

Born in Fiume on May 9, 1896, he first studied science at the University of Budapest. Afterwards he became an Italian citizen and transferred to the University of Rome, where in due course he became an assistant in the Institute of Comparative Anatomy under Prof. Grassi and Prof. Cotronei. From 1929 until 1936 he held the chair of zoology at Siena and then for a brief spell at Pisa. Since 1937 he has been professor of zoology at Padova and director of the Institute of Zoology.

D'Ancona took a full share in the administrative responsibilities of his University. But his enduring interest was in limnology and marine biology. The Hydrobiological Station at Chioggia was founded and directed by him, and also the Istituto Nazionale di Studi Talassografici at Venice, and he was a governor of the Marine Biological Institute of the Adriatic. In the end he was a man naturally called on by international authorities to further limnological and marine biological science. He was president of the Limnological Section of the International Union of Biological Sciences, and recently played a major part in initiating the international programme of productivity in relation to the sardine fisheries of the Mediterranean-Biscay-Channel area.

His researches were recorded in some 250 valuable papers and books. These illustrate clearly the development and expansion of his ideas. He gained a rigorous training in cytology and histology, the embryology of

fish, and by his work on sex-determination and differentiation in fish. He would turn to systematics in his work on the amphipod *Niphargus* as well as to the biology and systematics of fish, particularly of sturgeons and of eels: and these widening interests led him into his researches in hydrobiology and oceanography, and to his book *The Struggle for Existence*, well known in both the Italian original and its English translation.

He received many well-deserved honours both in his own country and in others. He was awarded the National

Prize of the Accademia dei Lincei in 1955 and the Medaille Memorial of the Fondation Albert 1^{er} Prince de Monaco. Only last year he received the Manley Bendell Prize.

Learned and kindly, he saw what should be done and how to get things done, and how to promote international goodwill and co-operation to extend our knowledge of Nature. We offer our sympathy to his wife, herself a distinguished zoologist and his collaborator, and to his daughter, a pathologist in the University of Padova.

C. F. A. PANTIN

NEWS and VIEWS

Chief Scientist of the Army Department:

Mr. E. C. Cornford

MR. E. C. CORNFORD has been appointed chief scientist of the Army Department in succession to Dr. W. Cawood, who has been appointed chief scientist of the Ministry of Aviation (*Nature*, 204, 923; 1964). Mr. Cornford graduated in mathematics at the University of Cambridge in 1938 and in the same year entered the Ministry of Supply. In 1945 he joined the Guided Weapons Department of the Royal Aircraft Establishment and stayed there until 1951. During this period he was concerned not only with guided weapons development but also with weapons research, air warfare and radar aids to navigation. From 1951 until 1954 Mr. Cornford served on the Staff of the Scientific Adviser to the Air Ministry. He then rejoined the Royal Aircraft Establishment, eventually to become the head of the Guided Weapons Department. In 1961 he joined the Ministry of Defence as chairman of the Defence Research Policy Staff. Since then he has been assistant chief scientific adviser (projects) at the Ministry of Defence. Mr. Cornford took up his new appointment on January 1.

Department of Genetics in the University of Leeds

A DEPARTMENT OF GENETICS has been established in the Faculty of Science of the University of Leeds. The new Department will be closely associated with the other biological departments in a School of Biological Sciences, a new building for which is at present being planned. It will be responsible for the elementary and advanced teaching of genetics both to specialists and to students from other departments, and the members will undertake, supervise and promote research in the subject, and co-operate with other departments in which research in genetical topics is already being undertaken.

Prof. J. R. S. Fincham

DR. J. R. S. FINCHAM, head of the Department of Genetics at the John Innes Institute, has been appointed to the chair of genetics and the headship of the new Department of Genetics in the University of Leeds. Dr. Fincham was educated at Hertford Grammar School and Peterhouse, Cambridge, where he read the Natural Sciences Tripos and gained first-class honours in Parts I and II. He was awarded an Agricultural Research Council research studentship in 1946 and spent two years in the School of Botany, Cambridge, followed by one year at the California Institute of Technology. During 1949–50 he was a Bye Fellow of Peterhouse and in 1950 he was awarded the degree of Doctor of Philosophy for his dissertation on "Genetic and Biochemical Studies on *Neurospora*". Dr. Fincham joined the staff of the Department of Botany at University College (later the University of) Leicester as lecturer in 1950 and was appointed to a readership in genetics in 1954. He has held his present post as head of the Department of Genetics at the John

Innes Institute, Bayfordbury, Hertford, since 1960. He spent the academic year 1960–61 as visiting associate professor of genetics at the Massachusetts Institute of Technology. In 1964, Dr. Fincham was awarded an Sc.D. degree of the University of Cambridge. His main research interests are in the field of microbial and molecular genetics and will complement work already in progress in the biological sciences in the University under the direction of Prof. R. D. Preston in the Astbury Department of Biophysics, and Prof. F. C. Hoppold in the Department of Biochemistry.

U.S. National Academy of Engineers

A NATIONAL ACADEMY OF ENGINEERING has been formed under the charter of the U.S. National Academy of Sciences. Acting under the authority granted by its Congressional Act of Incorporation of 1863, the National Academy of Sciences has approved Articles of Organization which bring the National Academy of Engineering into being as part of its own structure, operating on an autonomous and parallel, but co-ordinated, basis. The new Academy will share in the responsibility of the National Academy of Sciences of advising the Federal Government, on request, in all areas of science and engineering.

The adoption by the National Academy of Sciences of the Articles of Organization of the National Academy of Engineering brings to a climax the discussions which began in 1960 when the Engineers Joint Council, in co-operation with the Engineering Foundation and the Engineers Council for Professional Development, and with representatives from the National Academy of Sciences and the National Research Council, appointed a committee to make an intensive examination of the need and feasibility of an engineering academy. The President of the National Academy of Sciences will sit *ex officio* on the Council of the National Academy of Engineering, and the National Academy of Engineering will, in turn, have *ex officio* representation on the Governing Board of the Academy-Research Council. Concerning membership of the National Academy of Engineering, the Articles of Organization state that, in addition to the primary qualifications of important contributions to engineering theory and practice or unusual accomplishment in technology: "A candidate for membership shall be recognized by his associates and others for his professional integrity, as well as for his engineering accomplishments. Effectiveness and efficiency in leadership of organizations that have conducted pioneering or complex programs, have made noteworthy contributions to the field of engineering education, should be weighed as supplementing the primary qualifications . . ."

Aims and Objectives

THE aims and objectives of the National Academy of Engineering, as formulated by the committee appointed by Dr. F. Seitz and set forth in the Articles of Organization