made the tumours seem 'inoperable', eventually caused death not by subsequent widespread metastases but by their effects as 'foreign bodies' in the chest or abdomen. Death often resulted from a lung abscess that developed behind the intact tumour, from uraemia due to the compression of ureters by the tumour, or from massive haemorrhage as the tumour later invaded a blood vessel. Conversely, other patients with tumours that were clearly of rapid and unfavourable progression were subjected to fruitless operations and other therapy that increased the agony of the illness without affecting survival.

(2) In the design of therapeutic trials, the clinical population should be stratified according to symptomatic as well as morphological stages. Otherwise the base populations will not be reproducible, and the results will contain inconsistencies that will add to controversy and dilemma in statistics of cancer therapy[9]. Suppose, for example, that two treatments *A* and *B* are equally ineffective, but that treatment *A* is given to a population consisting predominantly of patients from symptomatic Stages I and II, while the population receiving treatment *B* consists mainly of patients from symptomatic Stages III and IV. If the patients have not been stratified for these symptomatic distinctions, the investigators will be unaware of these deceptive differences in two groups of patients that seem the same because they are morphologically similar. When treatment *A* is followed by results that are significantly better than those of treatment *B*, the difference may be erroneously ascribed to the treatment instead of to the disease.

(3) In the research at present devoted to the aetiology and pathogenesis of cancer, investigators may apply many biochemical, immunological, chromosomal and other tests to human neoplastic tissue. The results may show a wide range of variation that appears to have no particular correlation with the morphology of the tumour. Yet, if the neoplasms were categorized by function as well as by form, many of the apparent 'discrepancies' might be explained. Laboratory research at present dismissed as valueless might actually provide important new revelations if the neoplasms were more clearly and specifically defined for correlation.

The complexity of man increases the difficulty of studying human disease, but also enables a diseased man to talk. His description of his symptoms gives crucial information about function of the diseased structures under investigation.

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NEWS and VIEWS

Charles-Leopold Mayer Prize: Dame Honor Fell, F.R.S.

DAME HONOR FELL, director of the Strangeways Research Laboratory, Cambridge, has been awarded the Charles-Leopold Mayer Prize (valued at 100,000 francs) by the Academie des Sciences de l'Institut de France for her contributions to cell biology. These range from experimental embryological studies on limb bone rudiments to the analysis of the mechanism of action of vitamin A and other compounds on cell components and, in particular, the lysosomal apparatus. Dame Honor has been director of the Strangeways Research Laboratory since 1929. In 1964 she received the honorary degree of doctor of science from the University of Oxford and from Harvard University; she was elected a foreign member of the Royal Netherlands Academy of Science, and an honorary Fellow of Somerville College, Oxford. She is also an honorary doctor of science of Smith College, Massachusetts, an honorary LL.D. of Edinburgh, and a Fellow of Girton College, Cambridge.

Deputy Director and Keeper of the Herbarium and Library of the Royal Botanic Gardens, Kew: Dr. C. E. Hubbard, C.B.E.

DR. C. E. HUBBARD retired on November 30 from the post of keeper of the Herbarium and Library and deputy director of the Royal Botanic Gardens, Kew. Dr. Hubbard was born in 1900 at Appleton, Norfolk, and in 1916 started work in the Royal Gardens at Sandringham where, except for a spell in the Royal Air Force during 1918–19, he remained until he joined the Gardens staff at Kew in April 1920. He entered the Herbarium as a temporary technical assistant in 1923 and soon afterwards, under the guidance of Dr. O. Stapf, he started to specialize on the grasses (*Gramineae*), on which family he later became a leading world authority. In 1924 he made a plant-collecting journey in southern and central Spain with the late Rev. E. Ellman, and in 1930 he spent a year in Australia studying grasses and travelling extensively in Queensland, where he made important botanical collections. In 1954 he was awarded the O.B.E. for his outstanding work on the classification of grasses. On October 1, 1957, he succeeded the late Dr. W. B. Turrill as keeper of the Herbarium and Library and assumed the additional responsibility of the deputy directorship of Kew in 1959. In 1960 he was awarded an honorary doctorate of science by the University of Reading. He was advanced to C.B.E. in 1965. Dr. Hubbard's first major published contribution to the study of *Gramineae* was Part 5 of Volume 9 of the *Flora of Tropical Africa* (1930), written jointly with Dr. O. Stapf, including such difficult genera as *Setaria* and *Pennisetum*. In 1937 he alone wrote Part 1 of Volume 10. He contributed the treatment of the grasses to both editions of Dr. J. Hutchinson's *Flowering Plants* (1934, 1959). He also contributed the key to the tribes and genera in Hutchinson and Dalziel's *Flora of West Tropical Africa* (1936). In 1954 his *Grasses*, an admirably illustrated pocket-book dealing with those species occurring in Britain, was published by Penguin Books. In addition, he wrote numerous shorter papers, and many of them were published in the *Kew Bulletin*, including no less than twenty-eight in the series entitled "Notes on African Grasses". Dr. Hubbard's advice on the identification and classification of grasses has been sought by botanists and agriculturalists in many parts of the world, and his specialized knowledge of grasses has also enabled him to give useful service on the Advisory Committee for Research on Sea Defence.