

SIR WALTER BODMER

Sir Walter Bodmer FRS is one of the world's leading geneticists. He was born in Frankfurt am Main in 1936, the son of a Jewish doctor, who, because of the Nazi persecution, was compelled to flee the land of his birth. Manchester benefitted from the move, gaining an understanding family doctor; the United Kingdom benefitted by gaining a young citizen, who was to become an outstanding scientist.

From Manchester Grammar School he won a scholarship to Cambridge to study mathematics and it was his intention to continue with statistics. The accidental death by drowning of Professor Wishart, under whom Bodmer would have done his PhD, led him to turn to R A Fisher, who was then Professor of Genetics at Cambridge, and who is recognized as the father of both modern statistics and of the theory of experimental design, as well as a co-founder, with JBS Haldane and Sewall Wright, of the mathematical theory of evolution. Bodmer became Research Fellow of Clare College and demonstrator in the Genetics Department. Publications written during his Cambridge years range from the purely statistical to others on theoretical genetics, which were pioneering works in this field.

Sir Walter has written, 'My problem as a research student in genetics at Cambridge was that I had no biological background. That meant that I not only had to learn about DNA's structure but also about modern molecular biology and its involvement with moulds, bacteria and viruses.' To rectify this he crossed the Atlantic to Stanford University in order to work with Joshua Lederberg, a leading molecular geneticist who had already won the Nobel Prize for his discoveries. Bodmer became Professor in the Department of Genetics in 1968. It was during this time that his work on human cells grown in tissue culture became consolidated and led to the mapping of genes to specific chromosomes and to the study of gene function, particularly as it relates to cancer.

At this time he also became interested in the specific tissue types which characterize all individuals and which were important in the matching of-recipients for organ transplantation, in particular the kidney. It was Walter Bodmer, ably assisted by his scientist wife, Julia, who discovered many of these genes and who, by skilful analysis of laboratory data, unravelled the complexities of this genetic system, known as the HLA or major histocompatibility (MHC) system.

Walter and Julia Bodmer played a major role in helping international cooperation between scientists by organising regular international workshops. These meetings led to rapid progress in the field and provided a model for scientists who find themselves faced by a similar challenge. Sir Walter's leadership in the Human Genome Organization (HUGO), of which he was President from 1990 to 1992, is facilitating international cooperation in the world-wide project to write *The Book of Man*, as he called the mapping of the human genome, the blueprint which characterizes the human species.

In 1970, Walter Bodmer was part of the reverse brain drain when he left Stanford to take up the post of Professor of Genetics at the University of Oxford. After nine years he moved to London as Director of Research of the Imperial Cancer Research Fund (ICRF) and from 1991 to 1996 as its Director-General. In 1996 he returned to Oxford to become Principal of Hertford College and Head of the ICRF Cancer and Immunogenetics laboratory at the world famous Oxford Institute of Molecular Medicine. He has been Chancellor of the University of Salford since 1995.

He is author of several hundred research papers and his books include, jointly with others *The Genetics of Human Populations; Our Future Inheritance; Choice or Chance; Genetics Evolution and Man;* and *The Book of Man.*

In recognition of his outstanding contribution to science, the University takes great pleasure in conferring upon Sir Walter Bodmer its highest accolade, the degree of Doctor of Science, *honoris causa.*