

**PRESS RELEASE
WINNERS ANNOUNCED
1995/1415H KING FAISAL INTERNATIONAL PRIZE
FOR MEDICINE**

Topic: Molecular Immunology

One of the most fundamental advances in our understanding of the molecular basis of immune mechanisms has been the discovery of the cell structures that enable cells of the immune system to distinguish foreign from self-proteins. Another important practical problem has been how to produce antibodies in the laboratory for diagnostic and therapeutic use in man. The work of the three winners has been outstanding in these areas for its originality. Their discoveries open new vistas for future developments in the diagnosis and immune-regulation or therapy of many infectious diseases and immune-pathological syndromes. The Prize has therefore been awarded jointly to:

**Professor Gregory Paul Winter
Professor Mark M. Davis
and
Professor Tak Wah Mak**

Professor Winter (British) is a senior member of the staff of the Laboratory of Molecular Biology (LMB) in Cambridge, England. He received his PhD from Cambridge University in 1971. Professor Winter has made original advances in molecular immunology which are potentially of great importance in medicine. Of particular significance is his development of "human" antibodies directly in the test tube, thus avoiding the need of hybridoma technology that involves the use of live animals. These antibodies open the way for future applications both for therapeutic and diagnostic purposes and a number of clinical studies has already commenced

Professor Davis (American) is a molecular biologist with a PhD from the California Institute of Technology. His postdoctoral training was in the laboratory of immunology of the National Institutes of Health, after which he moved to Stanford University, eventually becoming a Howard Hughes Investigator and Professor in the

Department of Microbiology and Immunology there. In 1993, Professor Davis was elected to the National Academy of Sciences which is the highest honour for an American scientist.

Professor Mak (Canadian) received his PhD in 1971 from the University of Alberta for research on viruses that can cause brain damage. In 1991 he became the Head of the Division of Cellular and Molecular Biology at the Ontario Cancer Institute. Two years later he was made Director of the Amgen Institute of Toronto and Vice President of Amgen Inc., California which is a major biotechnology company. Professor Mak serves on numerous scientific advisory boards.

In 1984 Professors Davis and Mak independently discovered the structure by which the immune cells recognize and inactivate foreign proteins and viruses. This was an elusive problem that slowed progress in the field of immunology for several decades. In the coming years their work will have major implications for the design of new treatments for cancer and viral infections, as well as the therapy of autoimmune disease.