

Preface

In the four years since the appearance of the last edition, immunologists have shown little restraint in their appetite for new discoveries. Accordingly, several major changes and additions have been necessary. Many new diagrams are included and many others revised. The section on idiotype networks and the opportunities they afford for intervention is considerably extended. There is increased emphasis on the role of growth factors, interleukins, etc. Attention is drawn to the increased complexity of HLA-D loci and newer work on the structures of class I and II major histocompatibility molecules and their biological roles. I have expanded the section on monoclonal antibodies and their applications including the detection of human T-cell markers. The exciting developments in our belated understanding of the nature of the T-cell receptor are discussed, illustrating the important influence which molecular biological techniques are having on immunology. This includes our further awareness of the mechanisms generating immunoglobulin diversity and class-switching.

Additions to the subject of microbial immunity have made it more convenient to split the chapter into two; in the second I have expanded the discussion of modern vaccine development and inevitably included an account of acquired immunodeficiency syndrome (AIDS), the disease which has done more to educate the public about modern immunology than any other! The increased importance of the novel immunosuppressive drug, Cyclosporin A, is acknowledged, while recent technical developments such as Western ('immuno-') blotting and the use of phycoerythrins for double immunofluorescent staining are introduced. I have amplified the discussion of heritable factors in atopic allergy and of mast cell degranulation and the mediators this gives rise to. Factors underlying the development of autoimmunity are re-analyzed and consideration given to the roles of derepression of genes encoding class II MHC molecules and the controversial contrast suppressor cells. The increasing importance of autoimmunity to hormone receptors is documented and the contribution of thyroid growth antibodies to the spectrum of thyroid autoimmune disease given some prominence.

I finish with the fond hope that the reader will find immunology both enjoyable and exciting.

I believe the appearance of the book has been made more attractive by updating the printing format, introducing colour into the diagrams and adding more colour plates.