Survival of parasites, microbes and tumours: strategies for evasion, manipulation and exploitation of the immune response

EDITED BY M. J. DOENHOFF AND L. H. CHAPPELL

Preface

The papers in this volume draw attention to both new and recent information on the mechanisms employed by infectious pathogens to underpin their survival in the immunocompetent host and to facilitate their transmission between hosts. Classical survival strategies include induction of immunosuppression, antigenic variety and variation, host antigen sequestration, molecular mimicry, antibody destruction and invasion of cells or privileged sites. To these we can now add novel and diverse mechanisms with which the invader may manipulate the host for its own ends. They range from making use of a single molecular component of the immune system, through more sophisticated mechanisms of evasion to modulation of the immune response in the pathogen's favour, particularly by manipulation of T cell subsets and cytokine fluxes. There are then

examples of pure exploitation of the adaptive immune system by the generation of specific humoral and cell-mediated responses that prolong the invader's survival and aid transmission. The order of the chapters in this volume is intended to reflect this increasing level of complexity.

It is our hope that the studies described in this multi-disciplinary assemblage of papers will stimulate further research in this important area. We would like to thank all our contributing authors and the anonymous refereees for their commitment and help in seeing this project through to completion.

M. J. Doenhoff L. H. Chappell November 1997