

IMMUNOLOGICAL ASPECTS OF THE LIVER AND  
GASTROINTESTINAL TRACT

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EDITED BY

*Anne Ferguson, Ph.D., F.R.C.P., M.R.C.Path.*

*Gastrointestinal Unit, Western General Hospital  
Edinburgh and University of Edinburgh*

*and*

*Roderick N. M. MacSween, M.D., F.R.C.P., M.R.C.Path.*

*Department of Pathology, Western Infirmary, Glasgow,  
and University of Glasgow*

WITH A FOREWORD BY

*Geoffrey Watkinson, M.D. (London), F.R.C.P.*

*Consultant Physician and Gastroenterologist, Western Infirmary, Gartnavel  
General Hospital and Southern General Hospital; Honorary Lecturer in  
Medicine, University of Glasgow*

*President of the World Organisation of Gastroenterology (O.M.G.E.)*

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## *Preface*

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We have been privileged to start our academic careers at the beginning of the decade in which the immunological roles and hypersensitivity diseases of the gastrointestinal tract and liver have been defined. In the early 1960s IgA was reported to be the main secretory immunoglobulin, immunoblasts were shown to home to the intestinal mucosa and certain serum autoantibodies were described in patients with chronic liver disease. Shortly thereafter IgE and Australia antigen were discovered. Parallel advances in clinical investigation, in particular closed biopsy techniques, facilitated correlation of morphological changes with immunological mechanisms in disease of the gastrointestinal tract and liver. Only 10 years later, the concepts of immunity and hypersensitivity are regularly applied to the pathogenesis, diagnosis, treatment and prognosis of many chronic diseases in these organs.

In designing this book we have attempted to integrate theoretical and clinical immunology as they pertain in 1975; our ultimate aim is aptly described by Brachet as quoted by Professor Paronetto (page 319). We would like to think that this review provides a basis for the next major advances in the fields of gastrointestinal and hepatic immunology. As we see it, the outstanding problem in both sites is how to produce protective immunity without hypersensitivity.

The contributors to this book have most admirably met our requirements and we thank them for producing this series of authoritative reviews. We are grateful to our respective secretaries, Margaret Campbell and Anne Macleod, who have retyped all the edited manuscripts and ungrudgingly undertook this added commitment; and to Mr. Rogers and his staff of the library of the Royal College of Physicians and Surgeons of Glasgow, who checked the many references. Mr. Martin Lister of MTP has been most helpful at all stages of the preparation of the book, and we have drawn freely from his experience. Our spouses, John and Marjory, have not only accepted many hours of solitude

during the gestation of this book but also have given considerable help in the final proof reading and indexing.

Little research is now carried out in isolation. We have benefited from free access to many groups of patients; from skilled laboratory assistance and from continued and stimulating discussions, all provided by colleagues and friends. In particular we thank Geoffrey Watkinson who has been a guide and mentor over the years and who has done us the further honour of writing a foreword to this book.

Edinburgh  
Glasgow

Anne Ferguson  
Roderick N. M. MacSween

## *Foreword*

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For some years now there has been a real need for an authoritative review on the immunological functions of the gastrointestinal tract and liver, a subject of increasing interest to basic scientists, immunologists and clinicians. This gap has now been filled by two young enthusiastic workers in this rapidly expanding field, Anne Ferguson and Roddy MacSween, both of whom have worked for a number of years in clinical science departments at the University of Glasgow. In this time they have become internationally recognised for their research in the immunology of the small intestine and liver. With the help of 14 eminent scientific and clinical immunologists, drawn from Britain, Europe and North America, they have produced a text which is not only the first of its kind but one which I would rate as the most informed, the clearest, the most up to date and indeed the best currently available in the world literature.

The book is divided into 11 detailed chapters each of which is well planned, clearly written and illustrated and rounded off with a comprehensive bibliography, so that more than 1550 references are referred to in the text. The initial six chapters, edited by Dr Ferguson, deal respectively with the morphological basis of gastrointestinal immunity; the secretory antibody system; the gastrointestinal tract in immunodeficiency; enteric infection and immunisation; celiac disease and food allergy; and the immunological aspects of pernicious anaemia and inflammatory bowel disease.

A subsequent four chapters, edited by Dr MacSween, deal with the immunology of the liver, detailing successively its mononuclear and phagocytic functions; aetiological factors; immune mechanisms; and the clinical features and pathological aspects of autoimmune liver disease. A useful final chapter written by Professor Wright, an authority in the field, compares the role of immunity and hypersensitivity in gut and liver disease. Critically, he discusses what he considers the major advances described and the points of particular interest raised in the preceding chapters.

This important book will have a wide appeal to those working in many

scientific and medical disciplines. The graduate and undergraduate scientific immunologist will find sufficient breadth of knowledge and bibliography in each chapter to inform him of the basic immunological mechanisms as they relate to the gastrointestinal tract and liver. The book is essential reading for all practicing gastroenterologists who should have it on their shelves for regular reference, as it provides up to the minute accounts of all aspects of this rapidly expanding specialty and provides answers to many recurrent clinical problems. Certain chapters, notably those dealing with the common conditions of celiac disease, pernicious anaemia, inflammatory bowel disease and autoimmune liver disease can be read easily and with advantage by general physicians and by graduate and undergraduate physicians preparing for examinations.

Having had the privilege of working with both the editors for a number of years I was flattered to be invited to write the foreword for this important contribution to clinical immunology. I would congratulate editors and co-authors on producing such an excellent and authoritative text, which I can confidently commend to the scientific and medical world.

Glasgow

Geoffrey Watkinson

## *List of contributors*

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MARVIN E. AMENT, M.D.

Associate Professor, University of California Center for Health Sciences, Department of Pediatrics, Division of Gastroenterology, Los Angeles, California, U.S.A.

HERVE BAZIN, D.V.M., D.SC.

Research Scientist, Experimental Immunology Unit, Faculty of Medicine, University of Louvain, Brussels, Belgium.

P. A. BERG, M.D., PH.D.

Privatdozent, Department of Medicine, University of Tübingen, West Germany.

JOHN BIENENSTOCK, M.B., B.S., M.R.C.P.

Professor of Medicine, McMaster University Medical Centre, Hamilton, Ontario, Canada.

M. BJORNEBOE, M.D.

Professor, Physician-in-Chief, Bispebjerg Hospital, Med. Dept. B, Copenhagen, Denmark.

ROBERT L. CLANCY, PH.D., F.R.A.C.P.

Consultant in Clinical Immunology, Department of Clinical Immunology, Royal Prince Alfred Hospital, Camperdown, N.S.W. Australia.

ADRIAN L. F. W. EDDLESTON, D.M., M.R.C.P.

Senior Lecturer in Medicine and Consultant Physician, Liver Unit, King's College Hospital and Medical School, London.

ANNE FERGUSON, PH.D., F.R.C.P., M.R.C.PATH,

Senior Lecturer and Consultant Physician, University of Edinburgh  
and Gastrointestinal Unit, Western General Hospital, Edinburgh.

H. J. F. HODGSON, M.A., M.R.C.P.

Research Fellow, Academic Department of Medicine, Royal Free  
Hospital, London.

D. P. JEWELL, M.A., D.PHIL., M.R.C.P.

Senior Lecturer, Academic Department of Medicine, Royal Free  
Hospital, London.

R. N. M. MACSWEEN, M.D., F.R.C.P., M.R.C.PATH.

Reader in Pathology and Consultant Pathologist, University of  
Glasgow and Western Infirmary, Glasgow.

HANS D. OCHS, M.D.

Associate Professor, University of Washington School of Medicine,  
Department of Pediatrics Division of Immunology, Seattle, Washing-  
ton, U.S.A.

FIorenzo PARONETTO, M.D.

Professor of Pathology; Chief, Laboratory Service, Mt. Sinai School  
of Medicine and Veterans Administration Hospital, Bronx, New  
York, U.S.A.

DELPHINE M. V. PARROTT, D.SC.

Professor, University Department of Bacteriology and Immunology,  
Western Infirmary, Glasgow.

HANNE PRYTZ, M.D.

Research Fellow, Bispebjerg Hospital, Med. Dept. B, Copenhagen,  
Denmark.

RALPH WRIGHT, M.A., M.D., D.PHIL., F.R.C.P.

Professor of Medicine and Consultant Physician, University of  
Southampton and Royal South Hants Hospital, Southampton.