

# IMMUNOPATHOLOGY OF THE SKIN

SECOND EDITION

*Edited by*

ERNST H. BEUTNER, Ph.D.

TADEUSZ P. CHORZELSKI, M.D.

SAMUEL F. BEAN, M.D.



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Schools of Medicine and Dentistry  
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## Preface to Second Edition

The goals of studies in the field of immunopathology of the skin as set forth in the preface of the first edition remain unchanged. Some significant steps towards the achievement of these goals are set forth in this second edition, using the same basic methodology of defined immunofluorescence described in the first edition. Importantly, the wider use of the transport medium for skin biopsies now serves to make the immunofluorescence studies of tissues available to practitioners in all parts of the world.

This second edition deals with extensions of and refinements in the utilization of immunofluorescence and other immunologic studies of the skin diseases. These now include not only the bullous and connective tissue diseases, the vasculitides and conditions such as lichen planus but also the scaling dermatoses, most notably psoriasis. From the point of view of research valuable contributions now come from ultrastructural studies by immunoelectron microscopy. From a practical standpoint other serologic methods such as precipitation and agglutination tests for extractable nuclear antigens now play a more prominent role in immunodermatologic diagnosis.

Serodiagnostic studies of syphilis have been deleted from this second edition, in part, to accommodate the expanding body of knowledge in immunodermatology and in part because most dermatologists throughout the world now no longer deal with venereology.

All of the editors are deeply indebted to the wise guidance and thoughtful advice of Dr. Stefania Jablonska. Without her help this book would not have come into being.

Ernest H. Bennett, Ph.D.

Buffalo, January, 1970



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Buffalo, January, 1979

*Ernst H. Beutner, Ph.D.*

# Preface to First Edition

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THIS BOOK represents a first attempt to organize into a subsdiscipline the clinically relevant research, methodologies and clinical experience with studies of immunodermatology. At present this subsdiscipline deals primarily with immunopathologic and immunohistologic studies of the skin. It centers on the use of defined immunofluorescent staining for studies of bullous diseases and certain collagen diseases. The reproducibility of findings and more specifically the use of defined immunofluorescent methods necessary for achieving reproducible results constitute a prerequisite for the meaningful studies of the diseases under consideration.

It took half a century to elaborate the subsdiscipline of the histopathology of the skin. The immunohistology and immunopathology of the skin will probably prove to be even more difficult to elaborate to a comparable degree of sophistication since the quantitative serology, immunochemistry and the defined immunofluorescence which is derived from them are rather demanding disciplines in and of themselves. However, the efforts required to establish reproducibly defined test systems seem justified since they already appear to be fruitful in terms of diagnosis and management of bullous diseases and collagen diseases.

It must be kept in mind that immunofluorescent tests of the type described in this book when performed by inexperienced workers frequently lead to misinterpretations and thus *can do more harm than good for the patients* whose specimens are examined. To use these methods successfully the laboratory worker should have about a half year of training in immunology and immunodermatology. Since the number of cases of the diseases in which the methods described in this book are limited, and the prerequisites for the proper performance of the indicated immunodermatologic studies are rather demanding, these studies should be performed at large institutions that have the necessary trained personnel, resources and experience to do the work properly.

To elaborate and evaluate even a single fully documented set of immunodermatologic test procedures may require the better part of a decade. The aim of the editors and contributors to this book is to strike a middle ground between the rigorous discipline of laboratory work required to lay a firm foundation for each test system and the less rigorously controlled exploratory work necessary to discover new potential uses of immunofluorescence and other immunologic methods for the diagnosis. The book is organized in such a way as to stress which procedures are of proven value and which findings are of an exploratory nature.

The hope of the editors is to lay a firm but not a restrictive foundation for the subsdiscipline of immunodermatology. The objective is to try to maintain and increase the value of immunodermatology in the diagnosis and management of dermatoses with immunologic hallmarks.

Ernst H. Beutner, Ph.D.

## Acknowledgments

The preparation of this book would not have been possible without the diligent and devoted secretarial and editorial work of Mrs. Gloria Griffin.

The support of the Summerhill Foundation was of vital importance in the preparation of this monograph.

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Part 1

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