

# Handbook of inflammation

## Volume 5

*Series Editors*

L.E. Glynn, John C. Houck and  
Gerald Weissmann

### The pharmacology of inflammation

*Editors*

Ivan L. Bonta

Michael A. Bray

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*Editors*

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THE PHARMACOLOGY OF INFLAMMATION

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## Preface

The editors propose to publish, over the course of the next few years, a series of at least five volumes entitled 'The Handbook of Inflammation', each volume focussing on a major element of the inflammatory process. Insofar as possible the editors have endeavored to select authors who were both knowledgeable and willing to review in detail the voluminous literature of their particular field of inflammation in an interdisciplinary fashion. Each of the various editors are solely responsible for the selection of authors and subject of each volume, while all of the editors collectively are responsible for the volume topic.

The purpose of the series is to provide detailed and definitive reports of many of the multiplex components which go into the inflammatory process and to do this on an interdigitated and integrated basis. Because of the multidisciplinary aspects of inflammation, this is both necessary and difficult. In this field investigators must be capable of both 'looking down the tube' as well as 'pouring things into it'. To some workers the expression 'broken cell' means biological and membrane disaster, whereas to others it means that the ultracentrifuge is broken. Over the past decade, however, biologists have learned biochemistry to some degree and biochemists have had to learn some biology. Because of a shared vocabulary which has been developing as a consequence of this understanding of another discipline, a greater dialogue is now possible about inflammation than ever before. It is the conclusion of the editors that the compilation of interdisciplinary reviews side-by-side in the same volume will contribute to the further development of this colloquy.

L.E.G.  
J.C.H.  
G.W.

Volume 1—Chemical messengers of the inflammatory process

Volume 2—The cell biology of inflammation

Volume 3—Tissue repair and regeneration

Volume 4—Immunology of inflammation

Volume 5—The pharmacology of inflammation

## Introduction to Volume 5

In producing a handbook on the pharmacology of inflammation, the major problem is what *not* to include. Up to about fifteen years ago, the signs of inflammation were still those of Celsus: redness, heat, swelling and pain, and the subsequently added sign of loss of function. More recently, parallel with the rapid growth in the field of immunology, a greater appreciation has been gained of the role of various cell products in inflammation. This has led, in turn, to intensive research into the mechanisms of chronic inflammation, now clearly distinguished from the ancient description of the symptoms of acute inflammation. A proper consideration of inflammation and its therapy, consequently, must deal not only with vascular responses but also with immune responses and the biochemistry of connective tissue. To the clinician, however, acute or chronic inflammatory diseases present as an array of symptoms which, irrespective of their aetiology, require treatment. For this reason, we have chosen to approach the subject of the pharmacology of inflammation from a symptomatic standpoint.

This is clearly seen from the first section of the book in which various aspects of the inflammatory response are discussed, as is also the way in which present anti-inflammatory therapy affects these individual components. Here we have largely excluded a consideration of drugs affecting the immune system, partly because this would double the length of the book, partly because a large number of books on immunopharmacology are currently available and also because few immunomodulatory drugs are at present marketed for anti-inflammatory therapy.

The second section of this book is intended to reflect the different approaches now being taken to develop novel anti-inflammatory drugs with different mechanisms of action to those agents currently in clinical use. Some of these approaches have been subject to intensive investigation for several years, others are relatively new, while yet others have still to be exploited. The final section deals with the ways in which drugs can be monitored for experimental and clinical efficacy.

We hope that this latest volume of the Handbook of Inflammation Series will not only complement the four previous volumes, but also provide the reader with both a useful reference book and a glimpse of the possible future approaches to successful anti-inflammatory therapy. We are grateful to all chapter-authors who have contributed to the book.

September, 1984

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