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# TEXTBOOK — OF — RHEUMATOLOGY

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*Third Edition*

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*Third Edition*

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We wish to dedicate this edition of the  
Textbook of Rheumatology to our wives and children.

Lois Kelley and children:  
Paige Kelley, Ginger Kelley, Lori Kelley, and Mark Kelley.

Mary Ann Harris and children:  
Ned Harris, Tom Harris, and Chandler Harris.

Millicent Ruddy and children:  
Christi Ruddy and Candace Ruddy.

Georgia Sledge and children:  
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# Preface

The last part of the book covers specific disorders and diseases, grouped into 15 sections. The final two sections covering medical orthopedics, rehabilitation, and reconstructive surgery include an important new chapter on "The Chronic Pain Syndrome." In the latter chapters of the book we have chosen to include not only the current indications for the various surgical procedures but also brief descriptions of the relevant surgical techniques, potential complications, and appropriate post-

The field of rheumatology continues to show remarkable progress. An impressive transition has occurred, from the empirical approach of the nineteenth century spas to today's multidisciplinary specialty spanning the monumental advances in immunogenetics and immunoregulation and the modern miracles of total joint replacement. There have been many critical contributions to this evolution. Pathologists and orthopedic surgeons such as Goldthwaite, Smith-Peterson, and Wilson began important work early in the century. In the 1930s, internists such as Bauer, Cecil, Hench, Holbrooke, and Pemberton added their creative, scientific, and organizational skills to the embryonic discipline. Societies were created to stimulate the exchange of ideas, and an explosion of federal funding for research fostered expansion of essential scientific information.

Over the past three decades, consolidation of efforts in diverse disciplines has provided a truly scientific basis for rheumatology. The basic structure and function of immunoglobulins are now clarified, not only at the protein level but also at the gene level. Highly sophisticated techniques have allowed the careful study of specific lymphocyte subpopulations and their roles in controlling the immune response. Study of the inflammatory process has defined a multitude of effectors and their target cells. Now, the genes coding for these effectors are being cloned, as are the genes for the receptors themselves. These studies will allow not only improved understanding of their specific structure but also, eventually, the production of effectors, receptors, and their analogues in pharmacologic quantities. The identification within the major histocompatibility complex of specific genetic polymorphisms associated with unusual predisposition to rheumatic disease appears to represent a major breakthrough. Critical advances in bioengineering, matched with sophisticated surgical approaches, have established metal and polymer prostheses as major components of therapy. Considering all these frontiers along which we are advancing, the outlook for the future has never been brighter.

In the First Edition, the principal goal was to include a complete spectrum of information necessary to the understanding, differential diagnosis, and management of the patient with a rheumatic complaint. This led to the inclusion of chapters addressing areas not covered by existing reference books in rheumatology, such as the scientific basis of rheumatology, a large section on the general approach to the patient, a full evaluation of the diagnostic tests utilized in the evaluation of patients with rheumatic diseases, and extensive coverage of rehabilitation and reconstructive surgery as they relate to rheumatology. The Second Edition was similarly organized.

The Third Edition has been extensively revised, both in content and organization, and the chapters have been grouped in sections having more specific headings. For example, rather than the Second Edition's initial general section, "The Scientific Basis of Rheumatology," the initial six chapters of the Third Edition consider the "Structure and Function of Connective Tissue, Muscle, and Nerve," while "The Immune Response" is covered in the next seven chapters. This is followed by ten chapters addressing the "Inflammatory Response." All of these chapters include not only the many major advances in basic science occurring during the past several years but also discussion of their possible clinical implications.

The major section on "General Evaluation of the Patient," also updated, presents six totally new contributions from new authors. Although these chapters are difficult to write, they are especially useful for the clinician and, we believe, especially well done. The subsequent section on "Clinical Pharmacology" addresses specific pharmacologic applications, including methotrexate. Although we have omitted the chapter on pharmacodynamics and pharmacokinetics, the relevant information has been incorporated in the appropriate contexts.



The last part of the book covers specific disorders and diseases, grouped into 15 sections. The final two sections covering medical orthopedics, rehabilitation, and reconstructive surgery include an important new chapter on "The Chronic Pain Syndrome." In the latter chapters of the book we have chosen to include not only the current indications for the various surgical procedures but also brief descriptions of the relevant surgical techniques, potential complications, and appropriate post-operative rehabilitation.

The editors continue to believe that the quality of this textbook depends on the quality of its contributors. We also recognize the importance of regular replacement of contributors to ensure that even the best chapters will be extensively updated over a period of several editions. In the Third Edition, we have continued to follow this policy, which has allowed us to approach certain areas differently and to consolidate several areas to improve the flow of text. Even those chapters not having new authors were substantially updated and, where possible, improved in quality. The editors are highly pleased with the final product.

We wish to express our thanks to our teachers and to our students, from whom we have learned much, as well as to our colleagues for their patience and understanding of the time and energy the development of this textbook has required of us. Throughout the preparation of this edition, the expertise of the professionals at W.B. Saunders has continued to impress us. We benefited from the assistance of Mr. Lewis Reines, President of W.B. Saunders; Ms. Kathleen McCullough, Senior Developmental Editor; Ms Carolyn Naylor, Production Manager; Ms. Constance Burton, Senior Copy Editor; Ms. Karen O'Keefe, Designer, and Ms. Peg Shaw, Illustrations Coordinator. Their help has been essential and is deeply appreciated. Finally, we wish to thank our editorial assistants and secretaries, including Ms. Fran Frueh, Ms. Candace Johnson, Ms. Phyllis White, Mrs. Linda Newman, Mrs. Shemay Matson, and Ms. Ollie-May Lee. They have been of immeasurable assistance.

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