### 内分泌学及代谢

# ENDOCRINOLOGY & METABOLISM



fourth edition

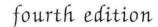
· Philip Felig · Lawrence A . Frohman

INTERNATIONAL EDITION



# ENDOCRINOLOGY & METABOLISM





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## ENDOCRINOLOGY & METABOLISM





fourth edition

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### **Dedication**

To our wives, children, and grandchildren:

Florence; Clifford, Minna, Noam, Yair, Daniella, and Maayan; David, Anna, Jacob and Jordan; and Elliot. P.F.

Barbara; Michael, Stella, Evan, and Dafni; Marc, Susan, Alicia, Hannah and Zoe; Erica, Aaron, and Leah; and Rena, Andrew, and Zachary. L.A.F.

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### **Preface**

In the six years that have elapsed since the publication of the Third Edition of Endocrinology and Metabolism, an enormous increase in our knowledge of basic concepts of cellular and molecular biology, genetics, and intracellular signaling mechanisms has occurred. This has resulted in a marked enhancement of our understanding of the etiology and pathophysiology of endocrine and metabolic disorders and our approach to diagnosis and treatment. The pharmacologic management of a variety of disorders has also been broadened (e.g., diabetes mellitus, polycystic ovary syndrome). This increase in our knowledge base has heightened the challenge of providing a textbook that properly balances a discussion of basic principles with the details of diagnosis and management of disease entities.

As in the previous editions, we have attempted to achieve this balance between basic science and clinical management in a manner that is useful for the clinical endocrinologist, as well as the research-oriented scholar and trainee in endocrinology. To accomplish this goal, many chapters in the present edition have been extensively revised and others have been entirely rewritten. In addition to blending basic science and clinical management in the chapters dealing with specific disorders, we have retained the format of an introductory series of chapters. These deal with general principles of the organization and the molecular and cellular biology of the endocrine system, the clinical presentations of endocrine disease, and the principles of endocrine testing.

We are grateful to our contributors for the enormity and the excellence of their efforts. We acknowledge with special thanks the contribution and support of our colleagues at McGraw-Hill, Martin Wonsiewicz, Publisher, and Susan Noujaim, Development Editor.

Philip Felig, M.D. Lawrence A. Frohman, M.D.

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