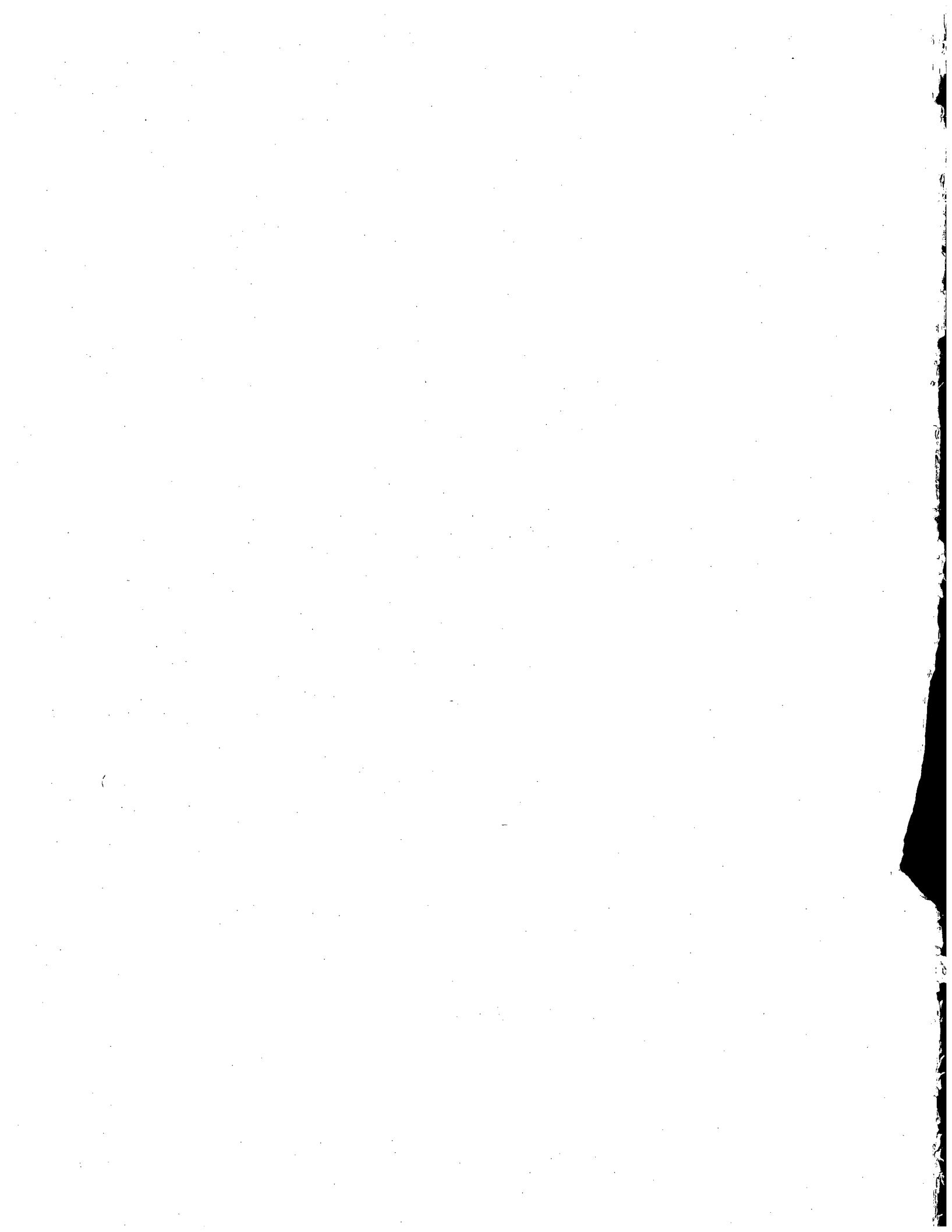


The Pancreas

BIOLOGY, PATHOBIOLOGY,
AND DISEASE

Second Edition



The Pancreas

BIOLOGY, PATHOBIOLOGY,
AND DISEASE

Second Edition

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Preface to the First Edition

Great advances have been achieved in our understanding of the exocrine pancreas, its biology, function, and abnormalities and diseases. This book is a compendium of current knowledge, concepts, and interpretations derived from those advances.

The scope of this volume encompasses the anatomy and fine structure of the human exocrine pancreas, including differentiation and development; details of exocrine secretion, its neurohormonal controls and its effects on digestion; and pancreatic diseases and their pathophysiology and management. Included are techniques of scientific and clinical investigation: biochemical methods, various experimental models, and improved means for visualization of the gland. Special attention is given to the enteroinsular axis, the insulin-acinar relationship, and the effects of nutrition on the exocrine pancreas.

The contributors to this volume were chosen primarily for their demonstrated excellence as investigators, authors, and teachers. All of them are engaged in basic or clinical investigations, are adept in the application of basic knowledge to clinical problems, and have the courage to express their own views on controversial issues related to their fields of expertise. We are grateful for their superb contributions.

The wealth of medical knowledge and insight contained in this volume forms the foundation of current research and has just begun to be applied in the management of pancreatic disease. We believe that this book will become a standard textbook of the exocrine pancreas that will be useful to basic and clinical scientists, to practicing clinicians and surgeons, and to students as well.

The Editors

Preface

Since the publication of the first edition of *The Exocrine Pancreas* in 1986, we have made rapid, long, and important leaps forward in our knowledge of the pancreas. These major advances have spurred the production of this, the second edition. For example, we now recognize that, although the exocrine and endocrine pancreas each have their specialized functions, there is a certain amount of interaction between them, particularly in relation to the regulation of digestion and metabolism of nutrients. Thus, we have changed the title of the book to, simply, *The Pancreas*, and expanded it to include exocrine-endocrine interactions, the anatomical and functional relationship between the exocrine and endocrine pancreas, clinical disorders, and organ transplantation.

We have also recognized advances in our knowledge of the pancreas by making changes, many of them major revisions, to all but three chapters that have been retained from the first edition. Also, some chapters from the first edition have had to be dropped to make room for such new chapters as "Transgenic Analysis of Pancreatic Function and Development," "Extracellular Matrix as a Regulator of Epithelial Polarity, Cell Growth, and Tissue Pattern," and other additions which offer more detailed presentations of the various models for experimental pancreatitis and discuss the availability of cancer cell line.

As in the first edition, we have encouraged the authors to go beyond the presentation of facts and mainstream thought by giving them the green light to express their own views on controversial issues. Because of this, redundancies and conflicts among authors that may appear from chapter to chapter were intentionally not edited out of the book. Whatever anxieties this may produce for the reader is, we are convinced, a small price to pay in exchange for fostering free expression among scientists and clinicians.

The editors trust that the success of the first edition's mission will be repeated in this second edition: providing a wealth of medical knowledge and insights to form a foundation for an up-to-the minute knowledge of the pancreas, its biological structure and function, its interworking with other organs of the human body, its pathology, and diseases.

We dedicate this second edition of *The Pancreas* to Frank P. Brooks, M.D., who, as a co-editor of the first edition, helped immensely in conceptualizing the organization and contents of this series. We hope that the spirit of his contribution to the success of the first edition carries over to its successor.

Dr. Brooks, who passed away in March 1991, published more than 200 articles during his long career at the University of Pennsylvania. He was a co-founder and president of the American Pancreatic Association and served as President of the American Gastroenterological Association. As a respected instructor, mentor, and researcher, his contributions to science were many, and he is missed.

The Editors

Acknowledgments

To our contributors who are new to this edition, we bid welcome and thanks. To those who have revised their work from the previous edition, we are doubly grateful. To *all* who have contributed to either edition, we commend and congratulate you for helping to build our knowledge of basic science and clinical expertise in our chosen area of emphasis. In your demonstrated excellence as teachers, mentors, investigators, clinicians, and authors, you have all played key roles in our progress toward overcoming diseases and disfunctions of the pancreas.

To readers of the first edition who have recommended changes, we appreciate your help. We have incorporated most of those suggestions.

Our heartfelt appreciation for their efforts and forbearance go out to the office support personnel of the various authors and editors. We also wish to acknowledge our debt, for their editorial guidance and assistance, to Dr. Martin W. Dodge at the editorial office of the medical journal, *Pancreas*, and to Rita Scheman, Jasna Markovac, Robyn Flusser, and David Steltenkamp at Raven Press.

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