Manual of Cardiac Surgery

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Cardiac Surgery

Second Edition

With 363 Color Illustrations

With Contributions by Alain Carpentier, MD

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*To our wives, Sharon, Victoria, and Sara
and to our families,
whose love and support
made this book possible*

Preface

The second edition of the *Manual of Cardiac Surgery* has the same goal as the first edition: to be detailed as possible regarding the process of cardiac surgery, from coverage of basic surgical technique to careful description of every essential step of each operation. Carefully conceived and superbly executed full-color illustrations are the primary vehicle for conveying this information.

The techniques chosen are those developed over three decades of clinical practice and resident training at the Oregon Health Sciences University and St. Vincent Hospital, Portland, Oregon, and Sutter Memorial Hospital, Sacramento, California. These techniques have served us well.

The first author moved from the Oregon Health Sciences University to Sutter Memorial Hospital in Sacramento in 1981. During the ensuing decade some of the techniques used by the first two authors have evolved in different directions. Where this is the case, the text indicates where the technique shown is used at the present time.

The text authors are proud to have the illustrator, Mr. Fredric Harwin, as coauthor. Mr. Harwin has been a significant contributor to the basic concepts and intellectual substance of the book. His art is a powerful instrument of education.

It is hoped that this second edition will have broad appeal to all persons caring for cardiac surgical patients. If it increases knowledge and understanding of cardiac surgery and thereby improves patient care, it will have met its main objective.

Bradley J. Harlan, MD
Albert Starr, MD

A medical illustrator must understand the philosophies and techniques of the scientist as well as those of the artist. For the second edition of *Manual of Cardiac Surgery* I worked with Dr. Harlan and Dr. Starr to create illustrations that allow the reader to visualize the surgical field as the surgeon sees it. For each illustration, I drew upon direct observation, operative photographs, fresh specimens, and, most importantly, extensive consultations with my surgeon co-authors. The sequence of creation was, first, discussion of desired illustrations, then a rough sketch, consultation with the surgeons, finished pencil drawing, another consultation, then finally the color rendering. These color renderings were then checked against actual surgery for accuracy in representation of tissues, instrumentation, tissue responses to manipulation, and consistency of representation.

Close communication between artist and surgeon is essential to produce illustrations that are both anatomically and surgically correct and artistically viable. Such communication was present during the preparation of this book to convey not only the fundamentals of the operations, but also their most subtle details.

Fredric M. Harwin

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