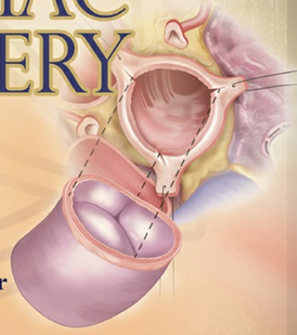




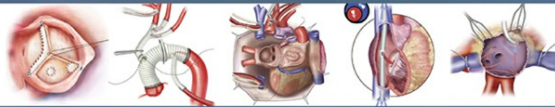
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# CARDIAC SURGERY



Frederick L. Grover  
Michael J. Mack



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## **Dedication**

*I am dedicating this atlas to my family for all of their support and sacrifice over the years; to my parents Wilma and Fred Grover for instilling in me a strong work ethic and the importance of giving back to society, my profession, my patients, my residents, and my family as I went through life; to my wife Carol of 55 years for her steadfast support and devotion, not only to me and family, but allowing me to take time away from the family to take care of patients, teach and work on projects such as this; to my sons Fred and Richard and their wives Theresa and Christen and their children Brooke, Keaton, Lange, and Tanner for their constant love and support in spite of my being at times overly committed to our profession; and to my many mentors who have taught me so much over the years.*

*Frederick L. Grover*

*To Barb, my wife of 35 years, and my children Annie, Andrew, Kate, Molly, and Ryan. Thank you for all the joy and support you have given me over the course of my career. I love all of you dearly. You guys are simply the BEST.*

*Michael J. Mack*

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## Series Preface

This series of mini-atlases is an outgrowth of *Mastery of Surgery*. As the series editor, I have been involved with *Mastery of Surgery* since the 3rd edition, when I joined two greats of American surgery, Lloyd Nyhus and Robert Baker, who were the editors at that time. Surgical atlases were common in those days, and *Mastery of Surgery* was one of several quality atlases which existed then; of particular quality were those by Dr. John Madden of New York, Dr. Robert Zollinger of Ohio State, and two others, with which the readers may be less familiar. The first was by Professor Pietro Valdoni, Professor of Surgery at the University of Rome, who ran 10 operating rooms simultaneously, and as the Italians like to point out to me, one physician to three popes. One famous surgeon said to me, what can you say about Professor Valdoni? “Professor Valdoni said to three popes, ‘take a deep breath,’ and they each took a deep breath.” This superb atlas, which is not well known, was translated from Italian by my partner when I was on the staff at Mass General Hospital, Dr. George Nardi. The second was a superb atlas by Dr. Robert Ritchie Linton, an early vascular surgeon whose atlas was of very high quality.

Atlases, however, fell out of style, and in the 4th and 5th editions of *Mastery of Surgery*, we added more chapters that were “textbooky” types of chapters to increase access to the growing knowledge base of surgery. In discussing with Brian Brown and others at Lippincott Williams & Wilkins, as well as with some of the surgeons who subsequently became editors of books in this present series, it seemed that we could build on our experience with *Mastery of Surgery* by creating smaller, high-quality atlases, each focusing on the key operations of a sharply circumscribed anatomical area. We have accomplished this due to the incredible work of the editors who were chosen for their demonstrated mastery in their fields.

Why the return of the atlas? Is it possible that the knowledge base is somewhat more extensive with more variations on the various types of procedures—that as we learn more about the biochemistry, physiology, genetics, and pathophysiology in these different areas, there have gotten to be variations on the types of procedures that we do on patients in these areas? This increase in the knowledge base has occurred simultaneously at a time when the amount of time available for training physicians—and especially surgeons—has been steadily declining. While I understand the hypothesis that brought the 80-hour work week upon us, which limits the time that we have for instruction (though I do believe that it is well intentioned), I still ask the question: is the patient better served by a somewhat fatigued resident who has been at the operation, and knows what the surgeon is worried about, or a comparatively fresh resident who has never seen the patient before?

I don’t know, but I tend to come down on the side that familiarity with the patient is perhaps more important. And what about the errors of hand-off, which seem to be more of an intrinsic issue with the hand-off itself (which we are not able to really remedy entirely), rather than poor intentions?

This series of mini-atlases is an attempt to help fill the void created by inadequate time for training. We are indebted to the individual editors who have taken on this responsibility and to the authors who have volunteered to share their knowledge and experience in putting together what we hope will be a superb series. We have chosen surgeons who are inspired by their experience of teaching residents and medical students (a high calling indeed), a quality matched only by their devotion and superb care they have given to thousands of patients.

It is an honor to serve as the series editor for this outstanding group of mini-atlases, which we hope will convey the experiences of an excellent group of editors and authors to the benefit of students, residents, and their future patients in an era in which time for education seems to be increasingly limited.

Putting a book together—especially a series of books—is not easy, and I wish to acknowledge the staff at Lippincott Williams & Wilkins, including Brian Brown, Keith Donnellan, Brendan Huffman, and many others. I would also like to thank my personal staff in the office, in particular, Edie Burbank-Schmitt, Ingrid Johnson, Abigail Smith, and Jere Cooper. None of this would have been possible without them.

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