
Preface

A qualitative leap in the understanding of cardiovascular and neural regulation by the renin–angiotensin system, and of the role of this system in tissue damage, has occurred as a result of the many recent advances in molecular genetic techniques. The cloning of the genes for the components of the renin–angiotensin system, the design of specific angiotensin receptor ligands, and the use of embryonic gene targeting techniques for the creation of mutant strains have established that the renin–angiotensin system is important in blood pressure regulation, ion and fluid homeostasis, and tissue growth and remodeling.

Further investigation of the mechanisms by which this system participates in cardiovascular regulation may shed some light on the pathogenesis of several cardiovascular diseases, e.g., hypertension, congestive heart failure, and chronic renal failure. Despite the promise of this system as a target for therapeutic interventions for these diseases, there are great challenges in the integration of the attempts to close the gap between the traditional literature of medicine and the explosion of information from the new technologies.

This book's title, *Angiotensin Protocols*, reflects the authors' strong efforts to translate expert knowledge into easy-to-follow practice. The book opens with introductory chapters, and each specialty section provides detailed methods covering a wide variety of techniques, ranging from genetic manipulation of targeted genes to functional studies of the renin–angiotensin system. An especially valuable dimension of the book is the *Notes* section in each chapter that places particular emphasis on the most critical steps of the procedure. With the ever-increasing advances in molecular biological techniques, this book is not all-inclusive. The reader is encouraged to seek out additional sources for the latest breakthroughs.

We have been very fortunate to enlist a group of renowned experts in angiotensin research for this book. I am grateful to the dedication and

contribution of our authors. In addition, I would like to thank the series editor, John Walker, for his constant guidance and support throughout the preparation of the book. I am also thankful to Julie Doyle for providing enormous effort toward the timely completion of this project. Finally, many thanks are owed to Thomas Lanigan and Craig Adams at Humana Press for their encouragement and assistance in the successful completion of this book.

Donna H. Wang