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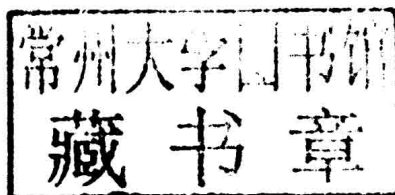
DIAGNOSTIC ENZYMOMOLOGY



Diagnostic Enzymology

Edited by
Steven C. Kazmierczak, Hassan M. E. Azzazy

2nd fully revised and extended edition



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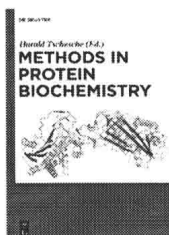
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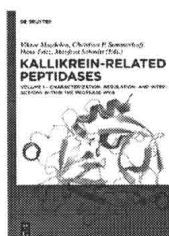
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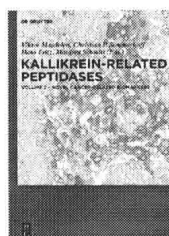
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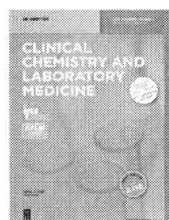
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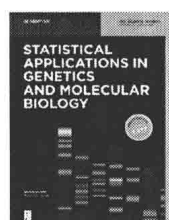
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Preface

The field of clinical diagnostic enzymology has undergone some significant changes since the first edition of the textbook, *Clinical Enzymology: A Case Oriented Approach*, was published by Lott and Wolf in 1986. Better standardization of methods used to measure enzymes and a greater understanding of *in vivo* and *in vitro* factors that affect the interpretation of changes in measured enzyme values necessitated an update to the original version of the text. A new chapter on natriuretic peptides, which have significant clinical utility for diagnosis of heart failure, has been included.

Our goal for this textbook was to update and expand upon the original text in order to provide a world class resource for students in clinical pathology as well as to help educators teach students the nuances of interpretation of changes in enzyme values.

Each chapter begins with a series of case studies that highlight some of the complexities of diagnostic enzymology. Following the case studies in each chapter are detailed discussions of the biochemistry and physiology of each enzyme and the role that each enzyme plays in health and disease. Reference intervals for each enzyme are also supplied. However, due to the fact that reference values for many enzymes are method dependent, the reference values that are supplied may not be applicable to all methods and analytical instruments.

Each chapter ends with a number of multiple choice questions which readers can use to assess their knowledge of clinical enzymology. These questions should also help readers preparing for board-type examinations. The question and solution manual can be accessed online at http://dx.doi.org/10.1515/9783110227802_Exercise.

We would like to thank the many authors who provided the excellent source material for the chapters. We would also like to thank Ms. Diana Abou El-Hassan and Ms. Heba Othman for their editorial assistance. Finally, we are in debt to our families for their forbearance and support throughout this project.

April 2014

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