



CROWLEY'S

AN INTRODUCTION TO

HUMAN DISEASE

Pathology and Pathophysiology Correlations

TENTH EDITION

**Emily Reisner
Howard Reisner**

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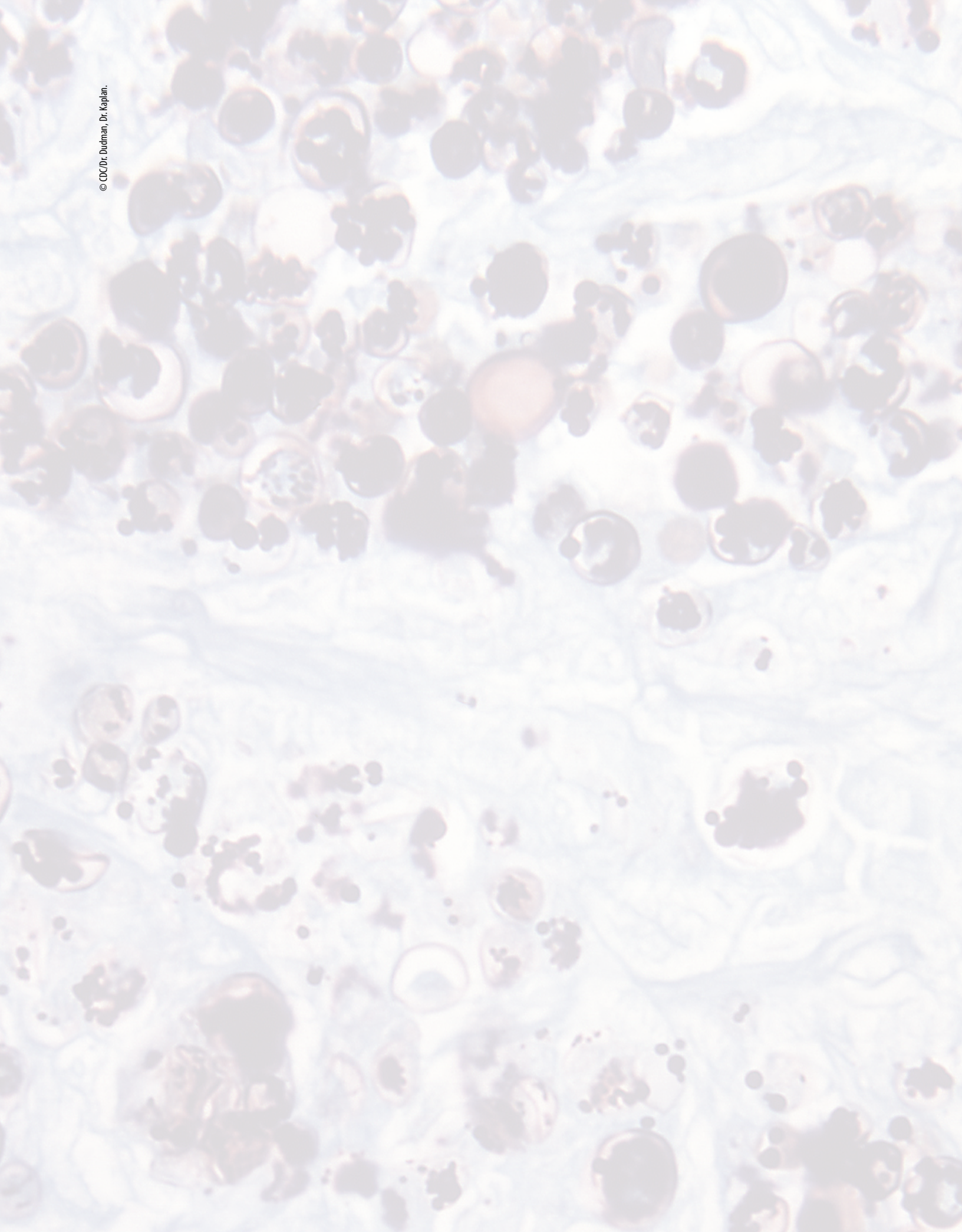
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This Tenth Edition is dedicated to the memory of Dr. Leonard V. Crowley, without whom there would be no book.



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Preface

In recent years, increased emphasis has been placed on how changes in the genome are expressed as disease. This information now has a larger role in both diagnosis and therapy, which is reflected in the text for this edition. We have preserved Dr. Crowley's organization from the *Ninth Edition*, starting with six general chapters followed by chapters on organ systems and their diseases, but in this *Tenth Edition* we have provided more information on the cellular and molecular roots of disease.

The Audience

How did we visualize the reader of this work? The authors hope that any individual interested in the health sciences who wishes to understand the nature of disease would find the text of interest. Specifically, we hope that the text would allow a beginning student of the health sciences who has a working knowledge of biology to equip themselves with the concepts and vocabulary for more specialized areas of study in any of the health related fields. To do this we have taken particular care to present recent information relating to the therapy and molecular diagnosis of disease.

New to This Edition

Throughout this new edition, extensive updates have been made.

Chapter 1

- Expanded principles of diagnosis, including additional material on taking a history, performing a physical diagnosis, and selecting a diagnostic test
- Updated information on clinical laboratory testing and imaging techniques
- Introduction of concepts including evidence-based and patient-centered medicine
- Addition of new testing procedures, such as virtual colonoscopy and single-photon computed tomography (SPECT)
- Updated with new figures
- Case presentation added
- Expansion of definition list
- Update of reference list

Chapter 2

- Added information on cell–cell signaling
- Added/updated information on cell injury and cell death
- Added information on Hayflick limit for cell division
- Case presentation added
- Expansion of definition list
- Update of reference list

Chapter 3

- Information on genes and DNA moved from previous edition Chapter 2 and integrated into presentation of genetics
- Information added on pedigree analysis and inheritance patterns

- Information on the HLA system moved to Chapter 5
- Information added regarding definition of race
- Case presentation added
- More than doubled the number of definitions
- Update of reference list

Chapter 4 (was Chapter 9 in the previous edition)

- Reorganized to better integrate with Chapter 3
- Presentation on fetal testing updated
- Material added on HIV infection in the mother
- Cases reviewed and updated
- New figures
- Number of definitions increased
- Update of reference list

Chapter 5 (was Chapter 4 in the previous edition)

- Material and terminology modernized; chapter linked to Chapter 6 on immunology
- Case presentation added
- Number of definitions more than doubled
- Figures replaced
- Update of reference list

Chapter 6 (was Chapter 5 in the previous edition)

- Eighty percent rewritten to focus on the most recent information on the development of adaptive immunity
- Material added on immunodeficiency
- Number of definitions increased
- New figures added
- New case added
- Update of reference list

Chapter 7 (was Chapter 10 in the previous edition)

- Extensively rewritten to focus on principles of neoplastic process in general rather than results of the process in specific organs; neoplasia presentations are now in the specific organ chapters
- Added two additional figures to illustrate critical points; updated other figures and tables

- Expanded presentation of oncogenes and tumor suppressor genes
- Updated presentation on immunotherapy and anticancer drugs
- Case presentation added; original short cases deleted
- Update of reference list

Chapter 8 (was Chapter 6 in the previous edition)

- Material added on hemorrhagic fevers, including Ebola
- Material added on molecular testing for microorganisms
- Material added on aspergillosis
- Number of definitions increased
- New figures added
- New case about measles added
- Update of reference list

Chapter 9 (was Chapter 7 in the previous edition)

- Chapter renamed to better reflect material
- Material added on Chagas disease, leishmaniasis, strongyloidiasis, and trichomoniasis
- Case presentation added; original short cases deleted
- Figures replaced
- Update of reference list

Chapter 10 (was Chapter 8 in the previous edition)

- Chapter renamed to better reflect material
- Chapter reorganized to improve presentation
- Material on Ebola transmission control added
- HIV material updated
- Case presentation added; original short cases deleted
- Figures replaced
- Update of reference list

Chapter 11 (was Chapter 13 in the previous edition)

- Completely rewritten; now focused on the heart and associated diseases
- Material on vascular disease moved to Chapter 12