

Dail and Hammar's Pulmonary Pathology

Third Edition

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Volume I: Nonneoplastic Lung Disease

Third Edition

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To
David H. Dail
Samuel P. Hammar

*For their many contributions to pulmonary pathology, and for their
conceptual and sustaining vision of this textbook*

Joseph F. Tomashefski, Jr.
Philip T. Cagle
Carol F. Farver
Armando E. Fraire

*To my dear wife, Cathy, and our children, Amy, Cary, David, Jessica, and
Sarah*

Joseph F. Tomashefski, Jr.

To my wife, Kirsten

Philip T. Cagle

To the memory of my parents, Albert and Gladys Farver

Carol F. Farver

*In memory of Dr. S. Donald Greenberg, dear friend, respected colleague,
and superb teacher*

Armando E. Fraire

Preface

It is with a great sense of good fortune, humility, and responsibility that we, the editors, have undertaken the task of updating Dail and Hammar's *Pulmonary Pathology*, one of the great modern textbooks not only in the field of lung pathology but also in the wider arena of general pathology as well. Following the publication of its first edition, "Dail and Hammar" rapidly became the standard against which subsequent textbooks of lung pathology were measured.

First published in 1987, *Pulmonary Pathology* provided an alternative to Herbert Spencer's time-honored text, *Pathology of the Lung* which, in its fourth edition at that time, was the reigning tome on the pathology of the respiratory system. The first edition of "Dail and Hammar" was in part dedicated to Dr. Spencer, who graciously penned the foreword for that text. The first edition was also dedicated to Averill Liebow, one of the giants of pulmonary pathology, under whom Dr. Dail had served and been mentored as a fellow. Dr. Liebow's influence was notable in the first two editions, and has continued in this edition in the revised classifications and current understanding of interstitial pneumonias and lung tumors, subjects in which Dr. Liebow played such a defining role. Several of Dr. Liebow's timeless original illustrations continue to grace the pages of the third edition.

In the 13 years since the second edition there have been astounding advances in medicine and pathology. The current edition has been revised and updated to reflect these advances. As much as possible, however, we have striven to remain true to Drs. Dail and Hammar's original goals, "to present the reader with an authoritative yet readable text which hopefully answers questions that might arise in facing problem cases and to offer the reader appropriate review of particular areas within the field of pulmonary pathology." In the face of wide-reaching revisions our intent has been to maintain the unique character of *Pulmonary Pathology*, and retain continuity with previous editions. Dr. Dail and Dr. Hammar have continued to play a major role in the present text, together contributing as author or coauthor to approximately one fourth of the chapters. Nine other chapters have been updated by contributors who were also featured in the second edition. Many, if not the majority, of the illustrations in the text represent the color counterparts of previous black-and-white figures. Electron microscopy, which was emphasized in the previous two editions, continues to have a presence in the third, mainly in the volume on neoplasia, and lays the foundation for a deep understanding of the histological appearances of tumors.

The changes in the current edition, however, are significant. The previous sizable single volume text has been divided into two volumes, covering neoplastic and non-neoplastic lung diseases, to afford the reader more ready access and less strenuous effort when referencing the sections of interest. Entirely new chapters have been added on the pathology of small airways disease (Chapter 25), forensic lung pathology (Chapter 31), molecular genetics of lung and pleural neoplasms (Chapter 33), and preinvasive (neoplastic) disease (Chapter 34). The topics formerly included in the second edition chapters on AIDS and tobacco-related injury have been

dispersed in the third edition, mainly throughout the sections on lung infections and lung cancer, respectively. Similarly the monumental chapters on common and uncommon lung tumors in the previous editions have been divided into seven smaller topical units housed in the second volume. Over 90 percent of the illustrations in the current edition are now presented in vivid color.

Pulmonary Pathology was one of the first pathology textbooks to emphasize the burgeoning field of immunohistochemistry and its application to diagnostic pathology, and the current edition continues to expound on the important diagnostic role of immunohistochemical stains. In this edition, however, we also embrace the molecular age with updated information on molecular pathology. In addition to extensive references to molecular aspects of lung disease, which are integrated within each of the individual chapters, the new edition includes two chapters (Chapters 33 and 34) devoted almost exclusively to molecular pathology. Chapter 33 (Molecular Genetics of Lung and Pleural Neoplasms) is essentially a text-within-a-text, serving as a compendium of information on the molecular pathology of lung tumors as well as a primer on basic molecular pathology for the uninitiated or molecularly challenged pathologist.

Within reason and to the best of our ability we have tried to maintain the reputation of *Pulmonary Pathology* as a comprehensive textbook that not only serves as a diagnostic guide to the “labyrinths of the lung,” but also enables the reader to explore the etiology and pathogenesis of lung diseases. The references, both classical and modern, have been greatly increased and, as of the time that the book went to press, are relatively current. The present edition also recognizes the growing importance of electronic information sources. Relevant Internet Web sites have been included among the chapter references, and Chapter 22 on pulmonary drug toxicity is essentially constructed around Web-based resources.

There are numerous individuals to whom we owe a debt of gratitude. Most importantly, we thank the many authors who gave of their time and talent, without



Figure 1. Members of the editorial board with Drs. Dail and Hammar. (From left to right: Carol F. Farver, Philip T. Cagle, David H. Dail, Samuel P. Hammar, Armando E. Fraire, and Joseph F. Tomashefski, Jr.)

financial compensation, to contribute to this book. Their expertise and dedication represent the soul of the work. We also appreciate their patience and understanding as both authors and editors faced the stressful implications of rapidly approaching (and receding) publication deadlines. We recognize and are especially thankful for the wonderful pulmonary pathologists under whom we have trained, who taught us the trade and served as our role models: Dr. S. Donald Greenberg (Drs. Cagle and Fraire); Dr. William Thurlbeck (Dr. Cagle); Drs. Jerome Kleinerman, John D. Reid, Merle Legg, and Lynne Reid (Dr. Tomashefski); and Drs. John Godleski and Les Kobzik (Dr. Farver). Finally, we are grateful to the Springer publishing firm, especially to our executive editor, Melissa Ramondetta and her editorial assistant, Dianne Wuori. A special thanks goes to our developmental editor, Stephanie Sakson, who kept us on track throughout the process, surmounting the hurdles of copyright permits, and the inexorable correlation of images, references, and text.

From the editors' perspective our labors now are ended (for a while at least). We leave it to you, the reader, to evaluate this text. We welcome your comments, positive or negative, which may help to direct future editions.

Joseph F. Tomashefski, Jr., MD

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