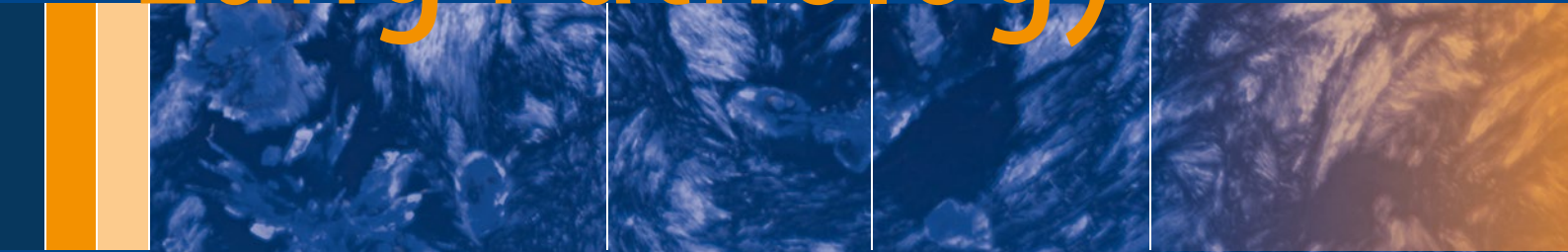


Chen Zhang  
Jeffrey L. Myers  
*Editors*

# Atlas of Lung Pathology



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# **Atlas of Anatomic Pathology**

**Series Editor:**

Liang Cheng

Indianapolis, Indiana, USA

This Atlas series is intended as a “first knowledge base” in the quest for diagnosis of usual and unusual diseases. Each atlas will offer the reader a quick reference guide for diagnosis and classification of a wide spectrum of benign, congenital, inflammatory, nonneoplastic, and neoplastic lesions in various organ systems. Normal and variations of “normal” histology will also be illustrated. Each atlas will focus on visual diagnostic criteria and differential diagnosis. It will be organized to provide quick access to images of lesions in specific organs or sites. Each atlas will adapt the well-known and widely accepted terminology, nomenclature, classification schemes, and staging algorithms. Each volume in this series will be authored by nationally and internationally recognized pathologists. Each volume will follow the same organizational structure. The first Section will include normal histology and normal variations. The second Section will cover congenital defects and malformations. The third Section will cover benign and inflammatory lesions. The fourth Section will cover benign tumors and benign mimickers of cancer. The last Section will cover malignant neoplasms. Special emphasis will be placed on normal histology, gross anatomy, and gross lesion appearances since these are generally lacking or inadequately illustrated in current textbooks. The detailed figure legends will concisely summarize the critical information and visual diagnostic criteria that the pathologist must recognize, understand, and accurately interpret to arrive at a correct diagnosis. This book series is intended chiefly for use by pathologists in training and practicing surgical pathologists in their daily practice. The atlas series will also be a useful resource for medical students, cytotechnologists, pathologist assistants, and other medical professionals with special interest in anatomic pathology. Trainees, students, and readers at all levels of expertise will learn, understand, and gain insights into the complexities of disease processes through this comprehensive resource. Macroscopic and histological images are aesthetically pleasing in many ways. This new series will serve as a virtual pathology museum for the edification of our readers.

More information about this series at <http://www.springer.com/series/10144>

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Chen Zhang • Jeffrey L. Myers  
Editors

# Atlas of Lung Pathology

 Springer

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*To my mentor, colleague, and lifelong friend, Anna-Luise A. Katzenstein, who taught me most of what I know but only a fraction of what she knows!*

*To countless pathology colleagues like Tom Colby, Henry Tazelaar, Marie-Christine Aubry, and Kris Unni. To generations of fellows and residents who taught me far more than I taught them, and to an amazing community of non-pathology colleagues who so generously served as teachers and tutors to fill in the gaps.*

*And most importantly to my wife, who never seems to tire of offering loving support.*

Jeffrey L. Myers

*To my family for their constant support and encouragement.*

Chen Zhang

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## Series Preface

*One Picture Is Worth Ten Thousand Words*

— Frederick Barnard, 1927

Remarkable progress has been made in anatomic and surgical pathology during the last 10 years. The ability of surgical pathologists to reach a definite diagnosis is now enhanced by immunohistochemical and molecular techniques. Many new clinically important histopathologic entities and variants have been described using these techniques. Established diagnostic entities are more fully defined for virtually every organ system. The emergence of personalized medicine has also created a paradigm shift in surgical pathology. Both promptness and precision are required of modern pathologists. Newer diagnostic tests in anatomic pathology, however, cannot benefit the patient unless the pathologist recognizes the lesion and requests the necessary special studies. An up-to-date Atlas encompassing the full spectrum of benign and malignant lesions, their variants, and evidence-based diagnostic criteria for each organ system is needed. This Atlas is not intended as a comprehensive source of detailed clinical information concerning the entities shown. Clinical and therapeutic guidelines are served admirably by a large number of excellent textbooks. This Atlas, however, is intended as a “first knowledge base” in the quest for definitive and efficient diagnosis of both usual and unusual diseases.

The *Atlas of Anatomic Pathology* is presented to the reader as a quick reference guide for diagnosis and classification of benign, congenital, inflammatory, nonneoplastic, and neoplastic lesions organized by organ systems. Normal and variations of “normal” histology are illustrated for each organ. The Atlas focuses on visual diagnostic criteria and differential diagnosis. The organization is intended to provide quick access to images and confirmatory tests for each specific organ or site. The Atlas adopts the well-known and widely accepted terminology, nomenclature, classification schemes, and staging algorithms.

This book series is intended chiefly for use by pathologists in training and practicing surgical pathologists in their daily practice. It is also a useful resource for medical students, cyto-technologists, pathologist assistants, and other medical professionals with special interest in anatomic pathology. We hope that our trainees, students, and readers at all levels of expertise will learn, understand, and gain insight into the pathophysiology of disease processes through this comprehensive resource. Macroscopic and histological images are aesthetically pleasing in many ways. We hope that the new series will serve as a virtual pathology museum for the edification of our readers.

Indianapolis, IN, USA

Liang Cheng

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## Preface

The surgical pathology of lung and pleural diseases has evolved substantially since the earliest days in which Averill Liebow, Charles Carrington, and others gave birth to the seminal observations that framed pulmonary pathology as a subspecialty discipline. The principal objective of this Atlas is to provide pathologists in training as well as experienced practitioners an easy-to-use practical diagnostic guide for lesions involving the lung and pleura. This Atlas may also serve as a good resource for clinicians interested in the histopathologic features that define the entities that afflict their patients. It covers a breadth of common problems likely to cross your microscope but without a level of detail likely to satisfy a desire for deep knowledge of their biology. The 14 chapters begin with a brief overview of normal histology before moving on to incidental findings followed by nonneoplastic and finally neoplastic diseases. Each chapter begins with a heading outline to summarize the contents. Individual diseases include a brief introduction followed by gross photographs for selected entities and multiple photomicrographs at different magnifications with detailed legends describing the findings. The introductory narratives are intentionally concise, including only essential clinical and radiological information and key pathologic features. Detailed descriptions of pathologic findings are found in the figure legends.

The emphasis in this book is on the histologic diagnosis of diseases using routinely stained slides as the foundation with a focus on high-quality hematoxylin-eosin-stained sections. Gross illustrations are included for those entities in which gross examination may play an important role in diagnosis. Illustrations of immunohistochemical stains are limited to those that are diagnostically relevant and/or necessary for certain tumor categories.

We hope that pathologists and practitioners at every level of experience will find this Atlas useful in evaluating the sorts of lung and pleural diseases likely to be encountered in any busy pathology practice.

Indianapolis, IN, USA  
Ann Arbor, MI, USA

Chen Zhang  
Jeffrey L. Myers



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