A new comprehensive edition of a standard work, detailing and illustrating the organization, structure, function and connectivity of all individual brainstem nuclei.

Olszewski and Baxter's Cytoarchitecture of the Human Brainstem
3rd, revised and extended edition

Editors
Jean A. Büttner-Ennever
Anja K.E. Horn

The new revised and extended edition of this standard work retains all the original and unique low- and high-power photographs which document the organization of the human brainstem as well as the individual character of the neurons of each nucleus. Many structural differences are described in neuronal groups, indicating as yet unrecognized functional differences. Furthermore unique details of the neuronal organization and cytoarchitecture are featured, providing clues to the functional properties of the cell groups and stimulating research projects.

Nomenclature and nuclear borders have been updated, in addition the text now contains new sections presenting an up-to-date summary of the functional neuroanatomy of each nucleus.

For neuroscientists and neurologists this atlas provides an invaluable and complete source of reference for both their scientific research and everyday clinical practice. Neuropathologists, neuroradiologists, neuropsychologists, neurosurgeons, physiologists and physicians will find the combination of low-power brainstem imaging with cytological, physiological and neuroanatomical data highly relevant. In addition the atlas offers researchers in other disciplines the opportunity to discover new correlations between structure and function, outlining new functional regions in the brainstem.

Main Contents
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• Materials and Methods
• Alphabetical List of Nuclei, Abbreviations and Original Names

Plates of Serial Sections through the Human Brainstem
Chapters of Individual Nuclei

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• Trigeminal Complex
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• Auditory Nuclei
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Subject Index
Lung Carcinoma in the Era of Personalized Medicine: The Role of Cytology

Lung Cytopathology

Editors
Maureen F. Zakowski
Marluce Bibbo

This special issue of Acta Cytologica focuses on the role of cytology in influencing therapy, directing management, and uncovering new strategies in the complex field of non-small cell lung cancer (NSCLC). With the discovery of the activating mutations in the epidermal growth factor receptor in 2004, a new era of personalized medicine in lung cancer began. Along with these discoveries came a new approach to the care of the NSCLC cancer patient with a direct impact on the practice of cytopathology. In an attempt to guide the cytopathologist and offer strategies to navigate this new era, this issue brings together data and techniques from international experts in diagnostics, testing, epidemiology, and new discoveries. New techniques are highlighted, including expanded use of immunocytochemistry and fluorescent in situ hybridization and use of laser capture microdissection in cytology. A view from interventional radiology, so important in obtaining specimens from cancer patients, is presented and a novel algorithm incorporating microRNA detection in these specimens is discussed. Telecytology as a way to diagnose remotely is explored. A look at NSCLC from the Asian perspective, which has taught us much about mutations and epidemiology, is included. A unique perspective from cytotechnologists who are often at the ‘front line’ of the battle against this disease is presented. These papers provide an in-depth look at the state of the art, as well as a guide to the future of cytology in the era of personalized medicine.

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