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## Preface

This volume of *Neuromethods* provides a collection of reviews and hands-on protocols on diverse aspects of the cytoskeleton. Conceptually, the book was designed as an interdisciplinary approach, assembling chapters on general aspects of the cytoskeleton in the form of reviews, which are thought to be helpful for the curious reader to polish his/her knowledge on the cytoskeleton in a brief and informative way. These reviews are flanked by protocols on diverse emerging techniques including in vivo and in vitro imaging of the cytoskeleton at work (Chaps. 1, 2, and 10). Since the book is aimed to present state-of-the art techniques, the editor had to acknowledge that the most favorable trend for unearthing the molecular machinery of the cytoskeleton today is the proteomic approach. It was therefore inevitable to include a general article on proteomic techniques (Chap. 5), which is supplemented by additional, more specific protocols addressing preparative strategies for the isolation of cytoskeletal components of the central nervous system (Chaps. 7, 11, and 15). Although the predominance of proteomic techniques in this collection of papers seems to appear a little biased from an editor's point of view, it pays credit to the fact that for future research, this arsenal of high-end molecular biological techniques will substantially foster our understanding of the cerebral cytoskeleton, the working horse in brain tissues. This notion becomes particularly important when degenerative diseases of the nervous system are considered. As such, it is not surprising that most of the chapters, in particular the extended review on the neuronal intermediate filaments (Chap. 9), contain a profound part on the pathology of the brain in which components of the cytoskeleton are involved. A limping horse, to stay in the frame of the picture, is not worth a penny. The editor therefore hopes that this collection of papers written by a team of experts may strengthen our efforts to overcome at least some of the fatal outcomes of the diseased brain cytoskeleton.

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