
Preface

In the 10 years since the publication of the first edition of *Cytoskeleton Methods and Protocols*, advances in fluorescent labeling, optics, and sample preparation have significantly improved the imaging capability of microscopy. Techniques for live-cell imaging, advances in software for the analysis of cell and organelle motility, and proteomics for assessing potential interaction of cytoskeleton components contribute to the arsenal of improved tools for cytoskeleton research. We continue to refine our understanding of the cytoskeleton as a dynamic synergy of components.

The second edition of *Cytoskeleton Methods and Protocols* reflects many of the recent technological advances in experimental tools for cytoskeleton research with emphasis on animal, plant, protist, and fungal model systems. New chapters describe methods for live-cell imaging, fluorescence microscopy, electron microscopy, analysis of cell and organelle motility, isolation of cytoskeleton components, and proteomics. Each chapter contains up-to-date protocols organized in a step-by-step format that is useful for established and novice investigators. A notes section provides a troubleshooting guide and often contains unpublished technical information.

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