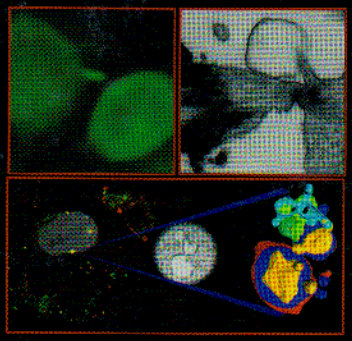
Correlative Light and Electron Microscopy



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In recent years, correlative microscopy has become an increasingly important approach for combining methods of different modalities. With the advent of GFP and the accompanying improvements in light and electron microscopy technology, it is the combination of both techniques in Correlative Light and Electron Microscopy (CLEM) that has generated the most attention. Today, the term CLEM is applied to a number of approaches which employ both the imaging and analysis of the same samples, ideally enhancing the quantity and quality of information over applying either technique separately. Motivated by the Editors' own research, this volume of *Methods in Cell Biology* presents a number of different CLEM approaches.

KEY FEATURES

- Discusses the most applicable and interesting combinations of techniques and imaging modes
- Focuses on recent advances rather than providing an historical perspective
- Aims to stimulate further discussion between light and electron microscopy, leading to the development of new correlative approaches in cell biology

Cover image: Top row: Correlative light (left image) and electron microscopy (right image) of HeLa cells during abscission. The images illustrate the final step of cytokinesis. (Modified from Guizetti et al., Science, 331,1616-1620)

Bottom row: This collage illustrates the workflow of a CLEM experiment for studying endocytic sorting events (from left to right). (See Brown et al., in this volume).

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