

Methods in Molecular Biology 1117

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## Electron Microscopy

Methods and Protocols *Third Edition*

This third edition of *Electron Microscopy: Methods and Protocols* expands upon the previous editions with current, detailed protocols on biological and molecular research techniques based on TEM and SEM as well as other closely related imaging and analytical methods. With new chapters on conventional and microwave assisted specimen, cryo-specimen preparation, negative staining and immunogold labelling techniques, DNA and RNA tracking using hybridization in TEM or Atomic Force Microscopy, TEM crystallography and cryoTEM 3D tomography, 3D tomography of resin embedded tissues using FIB-SEM, Correlative microscopy using fluorescence microscopy, confocal microscopy or immune labelling techniques for both TEM and FIB-SEM, and Elemental and isotopic identification and their distribution in cells and tissues using TEM, SEM, Scanning Transmission Electron Microscopy (STEM), Secondary Ion Mass Spectrometry (SIMS) and NanoSIMS. Written in the highly successful *Methods in Molecular Biology* series format, chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step, readily reproducible laboratory protocols, and tips on troubleshooting and avoiding known pitfalls.

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Biomedicine

ISBN 978-1-62703-775-4



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