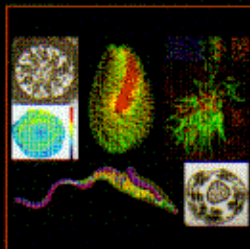


METHODS IN CILIA & FLAGELLA



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Cilia are tiny cellular structures made of microtubules that play a variety of essential functions in many eukaryotic cells. In this volume of *Methods in Cell Biology*, different model systems and approaches have been brought together to provide researchers interested in cilia and flagella biology with methodologies that can be applied to their questions. These include: different types of cilia such as sensory cilia in mouse photoreceptors and in *Drosophila* chordotonal organs; primary cilia imaging in the mouse kidney or the mouse brain; motile cilia in Ependymal cells, in the trachea, in *Xenopus*, in Sea Urchin, in the flat worm *Planaria*, in *Marsilea* and in *Paramecium*; methods for live imaging analysis of IFT in *Trypanosomas* and human cells; quantitative approaches to study fluid flows in Zebrafish Kupffer's vesicle or cilium bending in endothelial cells in Zebrafish; methods to study cilium orientation in the mouse heart; quantitative analysis of tubulin modifications of the *Drosophila* flagellum; protein entry into the primary cilium; G-protein coupled receptors in primary cilia in *C. elegans*; TIRF imaging in *Tetrahymena*, flagellar motility in *Chlamydomonas*; genomic approaches to identify genes involved in flagellar assembly; transition zone ultrastructure and function in *C. elegans*; and scanning and 3D electron microscopy methods for the study of *Trypanosoma* and *Leishmania* flagella.

KEY FEATURES

- Contributions from leading experts in this specialized field of research
- Methods and protocols for studying cilia and flagella in a wide range of model organisms and tissues

Cover image: Top left to right; Figure 1b, Chapter 17, Sanders et al; Figure 3a, Chapter 22, Aubusson Fleury et al; Figure 3c, Chapter 5, Li et al; Figure 3b, Chapter 3, Vládar et al.

Middle left to right; Figure 3h, Chapter 09, Fox et al; Figure 4, Chapter 2, Delgehyr et al.

Bottom left to right; Figure 9c, Chapter 24, Gluenz et al; Figure 6-C1, Chapter 15, Vieillard et al.

Volume 127 of **METHODS IN CELL BIOLOGY**

Series Editors: Leslie Wilson and Phong Tran



ACADEMIC PRESS

An imprint of Elsevier
store.elsevier.com

ISBN 978-0-12-802451-5



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