

**Microtubule dynamics****Anne Straube (ed)****Methods in molecular biology; vol. 777 –****Springer Protocols****Humana Press - Springer Verlag****Heidelberg, 2011****ISBN: 978-1-61779-251-9****330 pp – 56 figs – 94,95€**

*The main purpose of this book is to provide an up-to-date collection of methods and approaches that are used to investigate microtubule dynamics in vitro and in cells* wrote Prof. Anne Straube in her preface with in mind two groups of readers: *First, students and post-doctoral researches starting work in a microtubule laboratory. Second, established researchers in the microtubule field who require a resource for established and new methodologies.*

With this aim in mind, Prof. Straube succeeded in preparing an exhaustive compendium of papers dealing with: the isolation of tubulin from different sources (chapters 2-5); methods to study the microtubule assembly, the binding, the interactions and the dynamics (chapters 6-13); the ultrastructure of microtubules and the associated proteins (chapters 14 and 15); assays to study the mechanochemical properties (nucleation, turnover, force production) of

microtubules (chapters 16-19); the isolation and identification of novel microtubule-associated proteins (chapters 20 and 21).

The first chapter, written by Prof. Straube, try to answer the basic question *how to measure microtubule dynamics?* and in doing so is clearly illustrating the central role played by microtubules nearly in all the biological processes and, in fact, it cannot be in any other way considering that microtubules are *at the heart of cellular self-organization*. I have to reassure the reader that Prof. Straube did quite well in answering the pleonastic question she use as title and clearly explaining the current understanding of microtubule dynamic instability and how to carry on its study and the imaging dynamics of individual microtubules *in vitro*.

Considering that so many anticancer drugs are targeting the microtubules, the book will provide to be a usefull sources of ideas even to those scientists involved in developing new anticancer therapies; in fact, a great merit of the book is its capacity to arouse fervor for these ubiquitous molecules and the wish to see the role they played in our loved research topic.

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