

## Book review

**W. Xiao (Ed.). Yeast Protocols, Molecular Biology, second ed., Humana Press, New Jersey, 2006, p. 392 ISBN: 1-59259-958-3**

Producing a Methods volume that will be of value to a wide range of laboratory-based researchers presents an editor with a number of challenges. The greatest challenge is to ensure that the volume contains adequate coverage not only of the very basic techniques that a new graduate student might need, but also the latest 'flash' methods that a senior postdoc yearns to apply to his or her project. The Editor of this new volume in Humana Press's very successful '*Methods in Molecular Biology*' series (this is volume 313!) meets this challenge well. On the one hand the volume opens with a very basic outline of the key microbiological methods needed to work with any yeast species, the 'start-up kit' as the Editor refers to it in his introduction. The volume then has a nice balance of chapters describing basic methodologies, such as isolation of nucleic acids, transformation, and 2D gel electrophoresis, with chapters dedicated to highly specialised protocols such as peroxisome isolation and the use of antibody-GFP fusions to localise proteins in the cell. This does at times lead to duplication of information; for example there is a chapter dedicated to chemical and physical mutagenesis methods but the exact same methods are also fully described in a chapter whose focus is synthetic lethal screens. Perhaps surprisingly these two chapters both have the Editor as senior author. Nevertheless, I think the spread and overall balance of topics achieved is good and will ensure that the volume is accessible to a wide audience be they experienced yeast

researchers or novices using yeast as a tool for the first time.

With the title of this volume containing the word 'yeast' might lead a reader to expect coverage of the full repertoire of yeast species - of which there are in excess of 500. However, with only one or two exceptions, all the chapters describe methodologies applied to one particular yeast species, i.e. *Saccharomyces cerevisiae*. There is only one chapter on methods for the intensively studied fission yeast *Schizosaccharomyces pombe* and one on the expression workhorse *Pichia pastoris* (although I note that the latter species is referred to as *Pichia pastoralis* in the index?).

For anyone thinking of exploiting *S. cerevisiae* in their studies, this volume will be a very useful addition to their laboratory bookshelf alongside the more expansive and detailed yeast methodology texts (e.g. several volumes in the Methods in Enzymology series). Like any cookbook, it does not contain all of the 'recipes' you might want, but it does contain many of the standard 'recipes' that we all need to survive on a day-to-day basis and a range of useful tips that help the 'chef' to produce the desired outcome first time through.

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