

the mound of information. For example prior to reading this book we had little understanding of Southern hybridisation, but by the time we had read the section in this book we had a sound understanding of this particular area. The text is supplemented with informative diagrams. The protocols are outlined and explained excellently and give the scientific basis for the methods. Practical guidance is also given on the assembly of many apparatus.

Certainly after reading this book the word ‘essential’ is definitely needed in this book's title. We feel it would provide a indispensable guide to understanding and the investigation of cell structure for experienced and new researchers alike.

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J. Davey, M. Lord (Eds.), *Essential Cell Biology, Volume 2: Cell Function*, Oxford University Press, Oxford, UK, 2003 (v + 235 pp., £79.00, ISBN 0-19-963833-0).

The field of cell biology is an area of intense and dynamic research. Being such a dynamic area there is a rapid advancement of both knowledge and theories. The question of cell function is central to many disease processes and to the understanding of many of the properties of new protein discovered via, for instance, the Human Genome Project. The ability to integrate ideas from several different areas is central to form rational theories to the above questions.

There is a plethora of information and protocols available to investigate cell function. It is possible to lose oneself with this abundance of information; the success of *Essential Cell Biology Volume 2: Cell Function* is that it provides a structured and systemic form with which to approach these problems. The book looks methodically at each major area of cell function individually including measurement of signal transduction machinery and regulation of the cell cycle. Each chapter provides the reader with a summary of the essential and integral points in the appropriate area and in many instances the presence of diagrams helps to consolidate and supplement the text. This forms an excellent basis for a sound understanding for any student. The chapters are also supplemented with protocols

that scientists can utilise to investigate cell function. For example the assessment of MAP kinase is well described but having investigated the area myself the trouble shooting section is excellent and certainly would have helped us with many of the difficulties we had encountered. Although the protocols are not exhaustive they provide a useful basis with which to use in many cell types. Again the text provides the student with a sound scientific understanding as to the methodology of each protocol. There are comprehensive sets of references in each chapter directing the reader to more extensive areas of information.

This book provides an excellent resource for any scientist or student researching the area of cell function. It combines the basic science involved in designing protocols with its practical application. We congratulate the authors on a book that explain an area of biology that can be arduous in clarity and simple scientific language. It would be of equal value to the experienced scientist wishing to understand a new area or a student wishing to gain an overview of the protocols involved in cell biology. The first volume in this set of books provide useful information in cell structure which helps with a deeper understanding of the area of cell biology.

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W. Bains, *Biotechnology from A to Z, Third Edition*, Oxford University Press, Oxford, UK, 2003 (v + 413pp., £25.00, ISBN 0-19-963831-4).

As the authors of this book state ‘Biotechnology has come of age’. The success of this particular book is its ability to explain the essence of well understood areas such as fermentation but also to provide the reader with the tools to understand relatively new areas such as scanning tunnelling microscopy. Even with the rapidly expanding knowledge in this field this provides scientists essential factual as well as ethical information. Whilst not being exhaustive on any one topic it provides an excellent introduction and starting point to an area of biotechnology. In an area of science where the terminology can confuse due the author's lack of jargon, focus on clarity is very refreshing.

An excellent feature of *Biotechnology from A to Z* is that even areas that have only recently been highlighted by the popular media such as GM foods are simply explained without losing any of the critical details. This would make this book an excellent source of information for those not involved in the scientific sphere. There is a vast amount of information contained within this book, however, unlike similar styles of book it contains extensive cross-references allowing the reader scope for further, more detailed information. A book that can explain the method of biolistics in two paragraphs without losing the essence of the topic must be excellent. In many instances the diagrams under an entry adequately outline the area and the text expands excellently the area. The book now forms an essential part of our bookshelf and many would benefit from its economy and clarity of explanation.

This book provides an excellent resource for any scientist or student involved in the area of biotechnology.

The authors have provided an excellent guide to the area of biotechnology. The success lies in making a complex area such as biotechnology into a understandable topic without losing any of the detail.

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