

NEW TO THIS EDITION

- ❖ New Chapter 2 featuring simplified overviews of important signalling pathways
- ❖ New chapter bringing together the history and experimental techniques of cell signalling
- ❖ Expanded coverage of the role of cell signalling during development, experimental techniques, and the control of gene expression
- ❖ New Literature Link feature encourages students to engage with primary literature and develop critical thinking and reading skills
- ❖ New four-part structure organizes the subject according to its conceptual basis, the mechanisms of signalling, and their role in natural phenomena

Cover illustration: John Bawley/Science Photo Library

Signalling within and between cells is an essential part of many biological processes, from the development of the body to the activity of our immune system. Recent advances in molecular cell biology have allowed us to identify the components of signalling pathways, and examine how they interact to form the carefully orchestrated and controlled networks upon which the complexity of a living organism is built.

Starting with an overview of cell signalling and highlighting its importance in many biological systems, the book goes on to explore the key components of extracellular and intracellular signalling mechanisms, before examining how these components come together to create signalling pathways, which are so crucial to the survival of living organisms.

Cell Signalling presents a carefully structured introduction to this intricate subject, introducing those conserved features that underlie many different extra- and intracellular signalling systems.

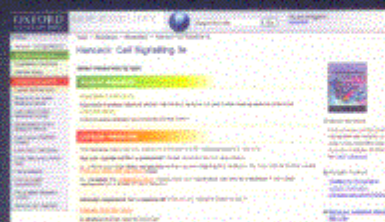
- A focus on generic components and concepts, rather than mechanistic detail, allows the reader to gain a thorough understanding of the principles that underpin cell signalling
- The ubiquity of key signalling mechanisms is highlighted, enabling you to see how similar mechanisms are conserved and harnessed in many biological systems
- The reader is directed to carefully chosen further reading articles with associated discussion questions, to assist students in engaging with the primary literature and developing critical thinking and reading skills

'Overall, one of the best that I have seen over the past 15 years in that it covers a large range of topics within a short text.'

Professor Brad Stith, Department of Integrative Biology, University of Colorado, Denver

'John Hancock's *Cell Signalling* is a straightforward introduction to a rapidly expanding field of biology. Its unimposing writing style, simple and uncluttered figures, and competitive price make it a wonderful introductory text for undergraduates.'

Dr Laura K. Palmer, Division of Mathematics and Natural Sciences, Penn State University



online resource centre

www.oxfordtextbooks.co.uk/orc/hancock3e/

The Online Resource Centre to accompany *Cell Signalling* features:

For Students

- Links to useful websites
- Hyperlinked references

For Lecturers

- Figures from the book in electronic format, ready to download

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ISBN 978-0-19-923210-9



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