

Principles of Development expertly illustrates the universal principles that govern the process of development, in a clear and accessible style.

The process of biological development is an amazing feat of tightly regulated cellular behaviours, powerful enough to result in the emergence of a highly complex living organism from a single cell, the fertilized egg.

Written by two highly respected and influential developmental biologists, Lewis Wolpert and Cheryll Tickle, *Principles of Development* focuses on those systems that best illuminate the common principles of the subject, and avoids overwhelming the reader with encyclopaedic detail.

With co-authors whose expertise spans the discipline, it combines a careful exposition of the subject with insights from some of the world's pioneering researchers in developmental biology, guiding you from the fundamentals to the latest discoveries in the field.

New to this edition:

- Carefully selected and updated further reading articles, together with an online Journal Club, stimulate exploration of the subject at a more advanced level.
- New photographic images aid visualisation of the often conceptually-challenging principles introduced, making them easier to grasp.
- Expanded content includes more examples from human development and medicine.
- Increased coverage of evolutionary-developmental biology, through a fully revised and updated chapter.
- Patterning of the vertebrate body plan is now covered in two separate chapters, to refine the scope and focus coverage.
- The inclusion of new end-of-chapter questions in both essay and multiple choice formats fully tests understanding of the material.



online resource centre

www.oxfordtextbooks.co.uk/orc/wolpert4e/

For registered adopters of the text:

- Electronic artwork from the book, available to download
- Journal Club: a selection of recommended research papers and discussion questions linked to topics featured in the book

For students:

- Multiple-choice questions, with feedback linked to the book
- Web links and web activities
- Flashcard glossary

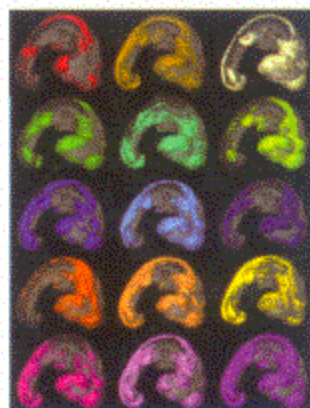


Figure 10.10
Colors assigned to individual cell cycle genes, warped onto a reference chick embryo HH21

- Expression 0
- C-Myc
- N-Myc
- PCNA
- Cyclin D1
- Cyclin D2
- Cyclin D3
- Cyclin D4
- CIP1
- CIP2
- CIP3
- CIP4
- CIP5
- CIP6
- CIP7
- CIP8

Cover image: 'Gene patchwork' of a chick embryo. Surface rendering of a chick embryo on to which expression patterns of 15 cell cycle genes captured by Optical Projection Tomography have been mapped. The expression patterns of the individual genes are shown in the panel on the back cover. Images by Gordana Pavlovskic and Monique Weller, University of Bath.

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