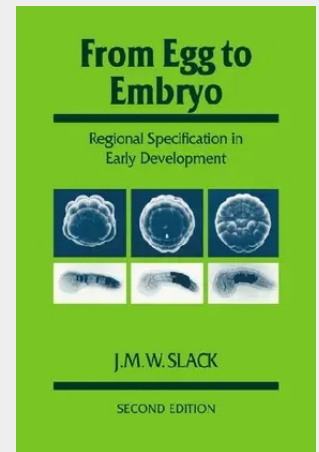


From Egg to Embryo

Regional Specification in Early Development

The last ten years have shown a dramatic revolution in our understanding of early animal development. This new edition of the successful first edition describes the result of this revolution and explains how the body plan of an embryo emerges from the newly fertilised egg. The book starts with a critical discussion of embryological concepts and explains in simple terms the mathematics of cell states, morphogen gradients and threshold responses. The experimental evidence on the mechanism of regional specification in *Xenopus*, molluscs, annelids, ascidians as well as *Caenorhabditis*, the mouse, the chick and *Drosophila* is then discussed. The whole chapter devoted to the exciting developments in *Drosophila* provides a clear guide to the subject, including a new table outlining the developmentally important genes. The emphasis throughout is on conceptual clarity and unity: bringing together the mathematical models, embryological experiments and molecular biology into a single, comprehensive coherent account.

The last ten years have shown a dramatic revolution in our understanding of early animal development. This new edition of the successful first edition describes the result of this revolution and explains how the body plan of an embryo emerges from the newly fertilised egg. The book starts with a critical discussion of embryological concepts and explains in simple terms the mathematics of cell states, morphogen gradients and threshold responses. The experimental evidence on the mechanism of regional specification in *Xenopus*, molluscs, annelids, ascidians as well as *Caenorhabditis*, the mouse, the chick and *Drosophila* is then discussed. The whole chapter devoted to the exciting developments in *Drosophila* provides a clear guide to the subject, including a new table outlining the developmentally important genes. The emphasis throughout is on conceptual clarity and unity: bringing together the mathematical models, embryological experiments and molecular biology into a single, comprehensive coherent account.



98,40 €

98,40 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780521409438

Medium: Buch

ISBN: 978-0-521-40943-8

Verlag: Cambridge University Press

Erscheinungstermin: 31.05.2006

Sprache(n): Englisch

Auflage: Revised

Serie: Developmental and Cell Biology Series

Produktform: Kartoniert

Gewicht: 535 g

Seiten: 348

Format (B x H): 156 x 234 mm

