

Developmental
Genetics

COVER TBC

DEVELOPMENTAL GENETICS

G. S. MIGLANI

Punjab Agricultural University, Ludhiana

KEY SELLING POINTS

- ◆ Rigorous, high level textbook
- ◆ Clear explanations of the role genetics plays in development
- ◆ Value for money

BOOK INFORMATION

Price: £ 35.00
ISBN: 1 904798 942
Pub Date: November 2006
Format: Paperback
Extent: 500 pages
Black and white images
Size: 240 mm x 160 mm

This book illustrates basic principles of development and related subject matter of genetics. The main objective is to integrate two disciplines of development and genetics into one. Thus it mainly deals with the role of genes in development.

Contents:

1. Developmental Genetics in its Historical Perspective
2. Genome Constancy in Development
3. Developmental Analysis of Nucleus and Nucleolus
4. Nucleo-Cytoplasmic Interactions
5. Gene Structure, Gene Function, Gene Expression and Gene Regulation
6. Temporal and Spatial Gene Expression
7. Sigma Factors in Gene Expression
8. DNA Rearrangements in Gene Expression
9. Cell-specific Activation of Genes
10. Gene Regulation by Histone, Non-Histone Proteins and Hormones
11. Post-transcriptional and Post-translational Regulation
12. Gene-protein System
13. Protein-phenotype System
14. Genetic Analysis of Development of Cell Cycle
15. Tissue Differentiation and Pattern Formation
16. Homeotic Genes
17. Genetic Control of Gametogenesis
18. Double Fertilization, Embryo and Endosperm Development
19. Seed Storage Proteins, Diversity Control and Synthesis
20. Gene Amplification
21. Penetrance, Expressivity, Phenocopies and Pleiotropy
22. Dosage Compensation and Sex-determination
23. Developmental Homeostasis
24. Morphogenesis