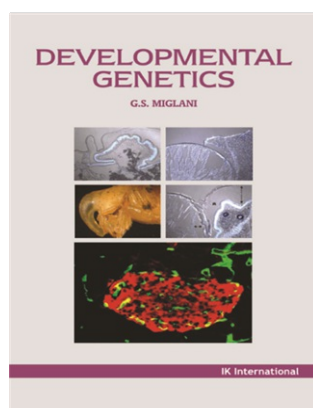


Developmental Genetics, 1/e

Gurbachan S. Miglani



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About the Book

Development is behind what one looks like. It is directed by genes, the units of heredity, which are made up to deoxyribonucleic acid (DNA) in all animals (including man), plants, microorganisms and most of the viruses except in some viruses where ribonucleic acid (RNA) is the genetic material. Developmental Genetics integrates the two disciplines of development and genetics into one.

This book is essential reading for postgraduate in developmental genetics, teachers teaching this subject and developmental biologists conducting research in this area. It is also suitable for candidates preparing for ARS/UGC NET examination.

Salient Features

- ▶Each chapter begins with a brief introduction and historical background.
- ▶The text explains both classical and recent material.
- ▶Various phenomena of developmental genetics explained with examples of animals, plant, bacteria and viruses.
- ▶Text explained with suitable examples, illustrations, tables and figures.
- ▶List of references and review questions given at the end of each chapter
- ▶Exhaustive glossary, author index and subject index given at the end of the book.

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About the Author

Gurbachan S. Miglani :- retired in 2005 as Professor of Genetics from Department of Plant Breeding, Genetics and Biotechnology, Punjab Agricultural University (PAU), Ludhiana, India after putting in 35 years of service. Taught general genetics, advanced genetics, biotechnology, biochemical genetics, molecular genetics, mutagenesis, immunogenetics, developmental genetics, and evolution to undergraduate and graduate students of constituent colleges of the PAU. Also taught genetics and zoology to undergraduates (September 1976-June 1980) at Howard University, Washington, D.C., USA, as a Graduate Teaching Assistant.

Professor Miglani was invited by School of Agricultural Biotechnology, PAU in March 2010 as Adjunct Professor, to teach molecular genetics, epigenetics and biotechnology to B.Sc. (Biotechnology)/B.Sc. Technology (Biotechnology), M.Sc. (Biotechnology) and Ph.D. (Biotechnology) students, which he continued till December 2010. He was rehired by PAU in January 2011 as Visiting Professor and he worked in this capacity till August 2020. He takes keen interest in popularization of science of genetics by way of radio talks and writing popular articles for magazines and newspapers. During last 11 years he has focused on writing of books, review papers and book chapters.

He has been associated with The Journal of Plant Science Research, published by the Society for the Promotion of Plant Science Research, Jaipur (India), for more than 12 years in different capacities, including editor of the journal. He is recipient of Meritorious Teacher Award of the PAU, Ludhiana, India, for the year 1997-98) and Sneh Prabha Shukla Memorial Award of Honor by Punjab Sahitya Kala Manch (Regd.), Ludhiana, Punjab, India for the year 2001.

He has guided twelve M.Sc. and one Ph.D. students and completed two prestigious research projects funded by the University Grants Commission, New Delhi, India. He has authored more than 175 publications (including research papers, review papers, books, book chapters, short notes/communications, abstracts, popular science articles) in Indian and foreign journals/magazines. Six laboratory manuals authored by him for different genetics courses and were published by the Punjab Agricultural University, Ludhiana, India. Contributed several chapters for books edited by Indian and foreign authors. He has also authored a 14 books - *Dictionary of Plant Genetics and Molecular Biology* (1998), *Basic Genetics* (2000), *Advanced Genetics First edition* (2002), *Developmental Genetics* (2006), *Advanced Genetics Second Edition* (2007), *Fundamentals of Genetics* (2008), *Genetic Material* (2013), *Gene Regulation* (2013) *Gene Expression* (2014), *Essentials of Molecular Genetics* (2015), *Genetic Engineering: Principles, Procedures and Consequences* (2016), *Plant Cells and their Organelles* (2017), *Cryptic Variants at the Adh Locus in Drosophila melanogaster* (2018), and *Genome Editing: A Comprehensive Treatise* (2019). All these books have been well received by the scientific community.