

DANIEL L. HARTL · ELIZABETH W. JONES

GENETICS

ANALYSIS OF GENES AND GENOMES

SIXTH EDITION

GENETICS: ANALYSIS OF GENES AND GENOMES, SIXTH EDITION by Hartl and Jones presents the modern world of genetics; treating classical, molecular, and population genetics as unified subdisciplines in a field that, even in our post-genomic era, still goes by the name "genetics." This approach to teaching genetics is a logical progression in a time when the various subdisciplines of genetics are so closely interwoven.

Written by two renowned authorities in the field, *Genetics, Sixth Edition* provides the most current, clear, comprehensive, and balanced introduction to genetics and genomics at the college level. It treats transmission genetics, molecular genetics, and evolutionary genetics as fully integrated subjects, and provides students with an unprecedented understanding of the basic processes of gene transmission, mutation, expression, and regulation. The text also explores the connections between modern and historical experimental methods used by geneticists, and offers valuable insight into the important historical and social context of genetics and genomics.

FEATURES

- **New to this edition!** Chapters have been rearranged to include updated content and new sections on genomics and proteomics, molecular evolution, history of the human Y chromosome, gene regulation through small RNA molecules, analysis of protein-protein interactions, and much more.
- The *Sixth Edition* includes **additional exercises in each chapter**. The text's author-written Problems are plentiful and diverse in level and format. They are designed to reinforce the concepts introduced within the text and to challenge students to achieve a full understanding of the material.
- Connecting past and present, the **Connections** are unique excerpts from the original literature of genetics, each introduced with a brief explanatory passage. The papers range from Mendel's early writing to the latest research, and serve to enrich the material in the text.
- A list of **Principles** and an **Outline** introduce the main focus of each chapter, and each chapter is concluded with a complete, concise **Summary**, a list of **Key Terms in Context**, a set of new **fill-in** exercises. A new **Word Roots** section helps students interpret and remember the meaning of the key terms. At the end of the book, there is an updated **Concise Dictionary of Genetics**.
- **GeNETics on the Web** is the text-specific site for *Genetics, Sixth Edition*. It serves as a guide to the vast amount of information on the Internet. Questions, exercises, and informative **on-line resources** are provided for each chapter. Frequently updated, and tuned-in to breaking news in the field of genetics, it is a valuable tool for both students and instructors. Please visit us at <http://www.jbpub.com/genetics>.
- **Ancillaries** include an **Instructor's ToolKit CD-ROM**, **Stock Transparency Set**, and the **Student Solutions Manual and Supplemental Problems**, which contains complete solutions to all the problems in the text and approximately 25–30 supplemental problems per chapter with solutions to all of the supplemental problems.



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