



GENETICS & EVOLUTION



Genetics and Evolution is a six-volume set that explores the principal fields of modern molecular biology from their origins to the most recent discoveries and technological breakthroughs. A century and a half after evolutionary and genetic science began, biology and medicine are coming together to form a powerful new view of the living world that is having a dramatic effect on human health and society. As well as introducing the basic terms and concepts, the set examines the most significant social and ethical issues surrounding current biomedical research and serves as a valuable guide to the world that science is creating.

Scientists are learning to manipulate the genes of plants and animals, to change existing organisms, and to "create" new ones. By taking control of the mechanisms that govern heredity in other species, humans are actively directing their own evolution. Breakthroughs are coming so quickly that many in the lay and scientific communities find them strange and frightening. *Genetic Engineering* traces the history of genetic science up to the present day and describes some of the developments in the first few years of the 21st century and how society is coping with the ethical challenges that accompany them.

The volume includes information on

- cell theory and chromosomes
- cloning
- the ethics of genetic engineering
- genetically modified plants and animals
- genomes
- the history of genetic engineering
- molecular genetics
- the "science" of heredity and evolution

The book contains more than 30 color photographs and four-color line illustrations, sidebars, a chronology, a glossary, a detailed list of print and Internet resources, and an index. **Genetics and Evolution** is essential for high school students, teachers, and general readers who wish to learn about the "revolution" of evolutionary research and discovery.

GENETICS AND EVOLUTION SET

Developmental Biology

Evolution

The Future of Genetics

Genetic Engineering

Human Genetics

The Molecules of Life

Russ Hodge is a writer and science education expert at the Max Delbrück Center for Molecular Medicine (MDC) in Berlin, Germany, one of the world's leading biology institutes. The author of many popular science books, he has also published hundreds of articles and interviewed such world-renowned scientists as Nobel Prize winners Max Perutz, Roald Hoffmann, Harold Varmus, and Christiane Nüsslein-Volhard.

Cover images, main: A sheep named Dolly, the world's first clone of an adult animal (© AP Images); others (© Shutterstock)

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