

# Conceptual Breakthroughs in Evolutionary Genetics

## A Brief History of Shifting Paradigms

**JOHN C. AVISE**

Department of Ecology and Evolutionary Biology, University of California at Irvine, CA, USA

*Conceptual Breakthroughs in Evolutionary Genetics* is a pithy, lively book occupying a special niche—the conceptual history of evolutionary genetics—not currently inhabited by any other available treatment. Written by a world-leading authority in evolutionary genetics, this work encapsulates and ranks 70 of the most significant paradigm shifts in evolutionary biology and genetics during the century-and-a-half since Darwin and Mendel. The science of evolutionary genetics is central to all of biology, but many students and other practitioners have little knowledge of its historical roots and conceptual developments. This book fills that knowledge gap in a thought-provoking and readable format.

This fascinating chronological journey along the many conceptual pathways to our modern understanding of evolutionary and genetic principles is a springboard for discussions in undergraduate or graduate seminars in evolutionary biology and genetics. But more than that, anyone interested in the history and philosophy of science will find much of value between its covers.

### KEY FEATURES

- Provides a relative ranking of 70 seminal breakthroughs and paradigm shifts in the field of evolutionary biology and genetics
- Permits ready access to each described subject through modular format
- Presents a historical overview of a field whose concepts are central to all of biology and relevant to a broad audience of biologists, science historians, and philosophers of science
- Includes extensive cross-references with a guide to landmark papers and books for each topic



**ACADEMIC PRESS**

An imprint of Elsevier  
[store.elsevier.com](http://store.elsevier.com)

ISBN 978-0-12-420166-8



9 780124 201668