

DNA Replication

Second Edition

Arthur Kornberg
Tania A. Baker

Widely hailed upon its publication in 1980, the first edition of Nobel Laureate Arthur Kornberg's *DNA Replication* is regarded as a classic of modern science. Kornberg's insights and his descriptions of the enzymology of DNA replication drew together the many aspects of the field within one authoritative volume and made it the standard reference in the field.

Now this distinctive work has been completely revised to reflect current research and interpretations. Arthur Kornberg and his coauthor Tania A. Baker have created an exceptional Second Edition that provides the reader with up-to-date coverage of DNA replication and related cellular processes—including excellent summaries of recent work on replication in eukaryotes and bacteria.

Features of the Second Edition

- expanded coverage of DNA polymerases, primases and primosomes, helicases, topoisomerases, DNA-binding protein, plasmids and organelles, and chromosomal origins
- the latest on mechanisms of replication initiation in prokaryotes and their essential recapitulation in eukaryotic systems
- summaries of the replication cycles of many prokaryotic and eukaryotic viruses and plasmids, presented in the framework of their life cycles
- related aspects of RNA synthesis and DNA repair, modification, recombination, and chromosomal segregation.

About the Authors

Winner of the 1959 Nobel Prize in physiology or medicine for his discovery of DNA polymerase, Arthur Kornberg is well known for his seminal work in DNA replication. He is Professor Emeritus on active duty in the Department of Biochemistry at Stanford University.

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