



Division of the History of Chemistry
American Chemical Society

Citation for Chemical Breakthrough

DNA Replication is Semi-conservative.



Proceedings of the National Academy of Sciences,
1958, 44, 671-682.

THE REPLICATION OF DNA IN *ESCHERICHIA COLI**

By MATTHEW MESELSON AND FRANKLIN W. STAHL

GATES AND CRELLIN LABORATORIES OF CHEMISTRY,† AND NORMAN W. CHURCH LABORATORY OF
CHEMICAL BIOLOGY, CALIFORNIA INSTITUTE OF TECHNOLOGY, PASADENA, CALIFORNIA

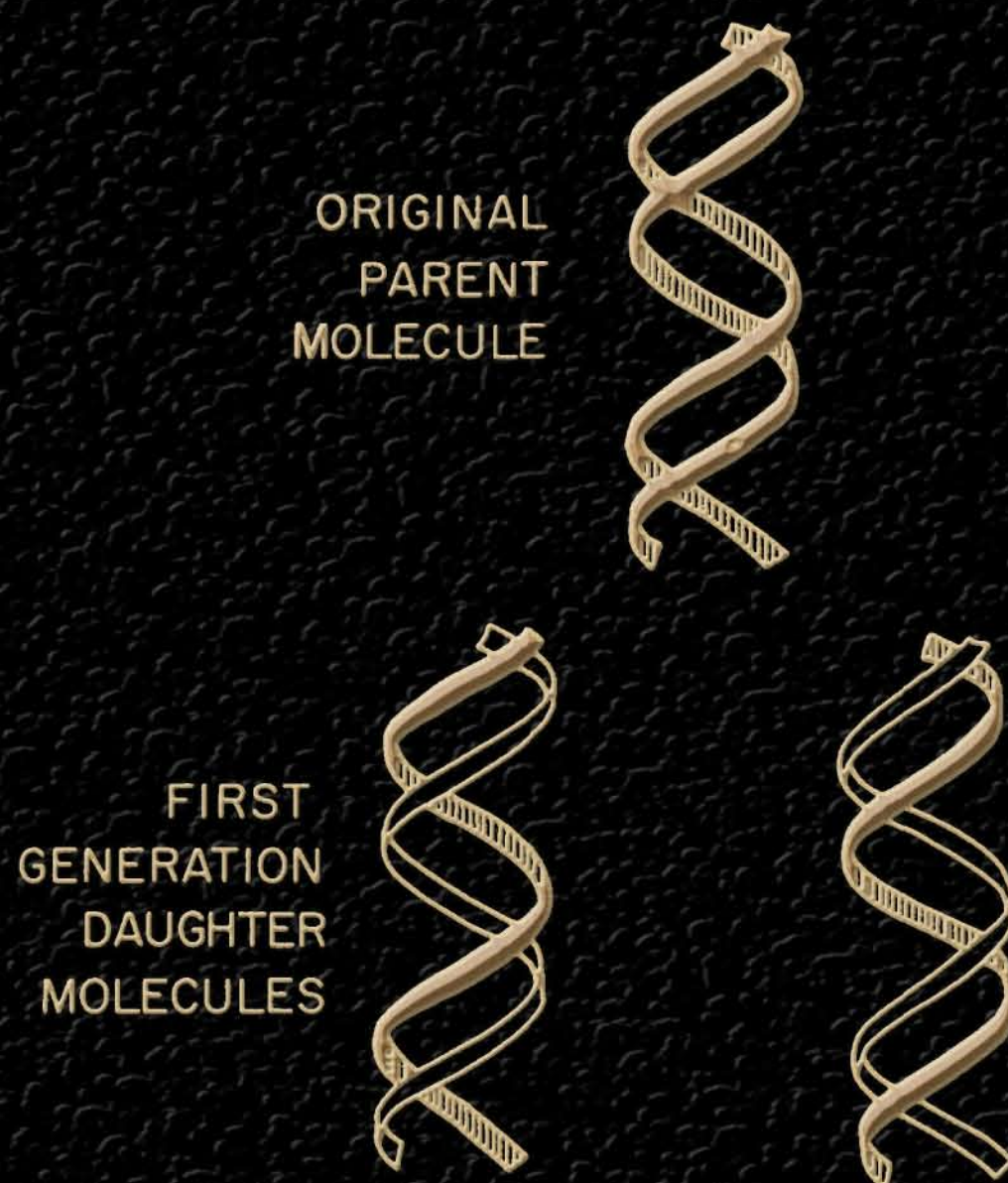


FIG. 6.—Illustration of the mechanism of DNA duplication proposed by Watson and Crick. Each daughter molecule contains one of the parental chains (*black*) paired with one new chain (*white*). Upon continued duplication, the two original parent chains remain intact, so that there will always be found two molecules each with one parental chain.

Presented to the California Institute of Technology, 2013