

Archaea

New Models for Prokaryotic Biology

Edited by: Paul Blum,

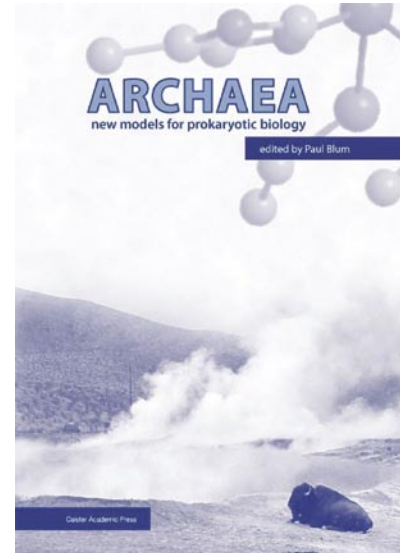
E238 Beadle Center for Genetics, University of Nebraska, Lincoln, USA

viii + 248pp, April, 2008

ISBN 978-1-904455-27-1 \$319/£159

A conventional view delineates cellular life into only two basic types called prokaryotes and eukaryotes. The prokaryotes are further subdivided into the Bacteria and the Archaea based on small subunit ribosomal RNA comparisons and conserved mechanisms for information processing. The study of archaeal prokaryotes has matured rapidly in part initiated by genomic science as well as a continuing interest in the biochemistry and metabolism of extremophiles. The authors present an expanding pattern of new information relevant to both the general and the technical reader. The book focuses on molecular biology and genomics and topics include the biology of metals, redox chemistry, respiration, sugar catabolism, nucleic acid modification, DNA replication, repair and recombination, transcriptomics, signal transduction and peptide antibiotics. Throughout the well referenced text the emphasis is on emerging topics in specific fields providing the reader with a vision of the future in the expanding world of Archaea. Essential reading for all archaea researchers and everyone with an interest in prokaryote molecular and cellular biology. A recommended book for all microbiology libraries.

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