

REPAIRABLE LESIONS IN MICROORGANISMS.

Edited by A. Hurst and A. Nasim. Academic Press, London and Orlando (Florida). \$55.00. xiii + 325 p.; ill.; index. 1984.

This book reviews the nature of the cellular damage produced in microorganisms by chemicals, ionizing and nonionizing radiations, host defense mechanisms and antibiotics, osmotic shock, freezing, high pressure, and heat, as well as the mechanisms by which microorganisms recover from this damage. When DNA is damaged it is most frequently repaired accurately and no mutations arise, but some types of DNA repair are error-prone and lead to mutagenesis. All of these topics are generally well reviewed in the book's ten chapters. The editors deserve praise for collecting all of these different damaging agents "under one roof." However, neither the editors nor the publisher deserve praise for the Subject Index, which is less than adequate, and greatly diminishes the usefulness of this book. The chapter on heat was obviously written in 1981 although two more recent articles were cited. This does not excuse the absence of information on the important topic of heat-shock proteins, however, even though most of the literature on this subject is not on microorganisms. Nevertheless, I recommend this book highly as an introduction into any of the numerous fields covered, even if the reader is not a microbiologist. After all, in biology, "What is true for *Escherichia coli* is true for the elephant" (Preface).

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