

biosynthesis genes carried out in a variety of species with the intention of improving the yields of  $\beta$ -lactam has met with varying success, a result that highlights the need to develop a method of predicting which are the important loci, perhaps by the application of control analysis to the problem.

In summary, the editors can be congratulated on compiling another hit. This work seems sure to emulate its predecessor and become a valued reference source in the field of fungal genetics.

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*Molecular Biology of Free Radical Scavenging Systems.*

Edited by JOHN G. SCANDELIOS. (Current Communications in Cell and Molecular Biology 5.) Cold Spring Harbor Laboratory. 1992. Pp. 284. Paperback. \$45. ISBN 0 87969 409 2.

This book is the latest title in this Cold Spring Harbor series. The book was stimulated by the success of a 1990 Banbury conference on aspects of oxygen-free radical research, which many of the contributing authors attended. The standard of the contributions is high, and the editor has compiled a series of

complementary and highly stimulating articles which cover a broad range of topics in free radical research. The book kicks off with an exploration of the possible links between oxidant damage to DNA, mitogenesis, ageing and cancer by Ames and Shinegawa, a chapter which is complemented by a thorough discussion of the mechanism and detection of this damage by Halliwell and Aruoma. Other high points of the book include a review of the links between the pathology of Down's syndrome and over-expression of CuZn superoxide dismutase, structure-function relationships in SOD, and the chapters dealing with the regulation of antioxidant defence genes in plants, yeast and bacteria. A minor gripe is the lack of a comprehensive chapter dealing with the oxidant stress regulons of bacteria, though the reader does get an introduction to these in the chapters by Loewen on regulation of bacterial catalase genes and by Liochev and Fridovich in their discussion of superoxide radicals in *Escherichia coli*. In conclusion, this book serves to bring together topics which will be of interest to anyone working in the growing field of free radical research and is thus recommended.

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