

Oxidative Damage and Related Enzymes: EMBO Workshop 1983

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Edited by G. Rotilio and J.V. Bannister

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This book contains contributions from participants in an EMBO Workshop held in Rome in 1983. The editors write that "the object of the meeting was to bring together as many scientists as possible from the various disciplines so that as much interaction as possible could take place". In my view that objective was surely achieved, as can be judged by the considerable number of interesting and stimulating contributions that are contained in this volume. The editors and their fellow organisers are to be congratulated on producing a collection of readable and valuable short papers. This collection will be of wide interest to the many of us who work on free radical mechanisms and cellular injury.

The book contains no less than 60 separate contributions in a tome of 429 pages excluding the index. The contributions are sub-divided into 3 main sections: (i) molecular mechanisms of free radical production and damage; (ii) cellular aspects of free radical production and damage; and (iii) mechanisms of antioxidant defence.

The first section contains 23 papers including contributions from Winterbourn, Haliwell, Gutteridge, Czapski, Mason, Bannister, Tappel, Sies, Rapoport, Ingelman-Sundberg and Richter that particularly attracted my eye and which I enjoyed reading. The second section with 22 papers has many stimulating contributions, for example, from Orrenius, Weiss, Sandberg, Yagi, Younes,

Wendel, Sies and Smith. The contributions include studies on the mechanisms of oxidative stress studied with whole cells (Orrenius), neutrophil generation of *N*-chloroamines (Weiss), photosensitisation mechanisms (Sandberg and Van Steveninck), lipid peroxide damage to blood vessels (Yagi), ischaemic damage and free radicals (Younes), Studies on lipid peroxidation in mouse liver (Wendel) and in perfused rat liver (Sies), and biochemical studies on paraquat toxicity (Smith). These brief remarks summarise the range of topics covered.

The third section contains 15 papers including contributions by O'Neill on potential repair mechanisms for hydroxy-radical damage; the role of indoleamine dioxygenase in self-defence mechanism (Hayaishi); studies on glutathione peroxidase, selenium, and glutathione transferases (Flohé, Mannervik, Ketterer, Ursini, Diplock); and some interesting contributions on superoxide dismutases (Rotilio, Marklund, Michelson).

The contributions mentioned in this short review are those that particularly appealed to me, but there is much else in this book that can be profitably read and studied. All in all, I am impressed by the uniform style and scientific standard of these many short papers; I recommend the book as an important addition to the biochemical literature on free radicals.

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