

A radical assessment

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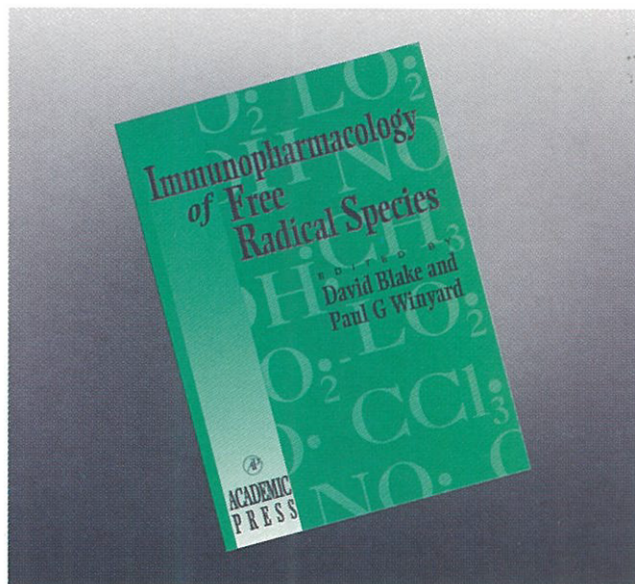
Immunopharmacology of Free Radical Species

edited by David Blake and Paul G Winyard.
Academic Press, 1995, 301 pages. \$45.00 hardcover
(ISBN 0-12-103520-4).

As part of the *Handbook of Immunopharmacology* series (Series Editor, Clive Page, King's College, London), this volume attempts to present an up-to-date account of the role free radicals may or may not play in different human disease states. Blake and Winyard, from the Bone and Joint Research Unit, London Hospital Medical College, make the point that free radicals have been implicated in a whole host of diseases, implying "that they perhaps do not have a pivotal etiological role in any, but are primarily involved in the perpetuation of disease".

In view of this, the Editors have done a fine job of bringing together a good group of top scientists studying reactive oxygen. Grootveld and Rhodes present methods for detection and measurements, Darley-Usmar *et al.* discuss lipid peroxidation and cardiovascular disease, Rice-Evans evaluates antioxidants in atherosclerosis and Shattock and Haddock deal with oxidant stress and the heart. Clemens and Panetta address the central nervous system, Green discusses renal diseases and Kus *et al.* inflammatory joint disease. Skin, eye and gastrointestinal/hepatic locations are presented in the chapters by Morris *et al.*, Goss-Sampson *et al.* and Simmonds, respectively. Muscle fatigue and damage is treated by Jackson *et al.*, diabetes mellitus by Sinclair and Lunec and DNA damage in relation to carcinogenesis by Aruoma and Halliwell. Finally, there are chapters on lung and environmental exposure to pollutants (Yeadon), liver injury (Cheeseman), conioses (Evans), and therapeutic intervention strategies (Panetta and McCall).

These are fine chapters. But where is the immunopharmacology of free radical species? I would have expected a little more on the relationships to the cytokine network, on the crosstalk with immune cells, on the potential contribution of reactive oxygen species to the regulation of



immune responses, and so forth. Also, the relationships between tumor necrosis factor alpha or interleukin-1 and the NF- κ B system deserve more than half a page; it is possible, however, that these recent advances were not available at the time of going to press.

Twenty-seven of the 35 authors are from the UK, mainly institutes in London, while the remainder are from industry or two institutes in the USA, so the selection of viewpoints gives a special focus. This is fine, but unfortunately the focus is excessive; some important background and recent developments that happen not to be in the areas of interest of the chosen authors are simply missing, and this means that some of the chapters appear a little thin. The good quality of what is being said outweighs this minor criticism, however. Blake and Winyard can be content with and congratulated for having put together a high quality book on free radical species in medicine.

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