

## Reviews in Environmental Health, 1997

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Once a year *Environmental Health Perspectives* publishes a supplement containing review papers that cover the broad field of environmental health. The objectives of the supplement are to summarize new developments in environmentally relevant areas, to provide a perspective for these new findings, and to provide sufficient background information for those not familiar with the specific topic. While it is imperative to have specialists in the various disciplines, it is critical that scientists not lose sight of the broader picture. In this annual review issue we continue to provide information that encourages our readers to reach beyond their own scientific specialties and to expand their depth and breadth of knowledge.

The current annual review issue has 13 articles covering a potpourri of topics. Two papers deal with mechanisms of toxicity, including one paper by Vallyathan and Shi on the role of reactive oxygen species in lung injury. In a second paper Scicchitano and Mellon discuss the role of transcription-coupled DNA repair in response to genomic damage from environmental agents. Health risk issues are addressed in six papers. McCann, Kavet, and Rafferty use animal models to assess the potential for electromagnetic fields to influence the process of carcinogenesis. Piver, Jacobs, and Medina review health risks from contaminated aquifers as well as progress in the development of transport models

and remediation technologies. Olin, Neumann, Foran, and Scarano highlight selected topics in the current debate on the scientific merits and shortcomings of cancer risk assessment methods. Verhaar et al. present an integrated approach to study the toxicology of complex mixtures. Morgan addresses the use of biological exposure indices in evaluating the potential adverse health effects of occupational chemical exposures. Daniell et al. review disturbances in heme synthesis and the role of environmental chemical exposures and touch upon the controversial area of multiple chemical sensitivity. Molecular epidemiology and the role of the tumor suppressor gene *p53* is reviewed by Semenza and Weasel. Remediation of environmental pollution is addressed by Gray and Bergbreiter, who describe the use of polymeric smart materials, and by Bonaventura and Johnson, who discuss the role of microbes. The field of ecotoxicology is reviewed in two papers. A general overview of the field of aquatic ecotoxicology is presented by Boudou, who emphasizes the complementarity between field and laboratory studies. The complexity of ecological hazard assessment and the role of sentinels and biomarkers are discussed in an article by LeBlanc and Bain.

With this edition of the supplement, you are once again invited to enrich your scientific life and explore new areas.