

## Book review

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*Glycosaminoglycans and Proteoglycans in Physiological and Pathological Processes of Body Systems*: edited by R. S. VARMA AND R. VARMA, Karger, Basel, 1982, xi + 520 pages, DM 595; \$297.

This is a multi-authored book divided into sections: Introduction, Isolation and analysis of macromolecules, Regulation of metabolism, Metabolism in systems of the body, Metabolism in lysosomal disorders, Multisystem involvement in aging and disease, and Metabolism in relation to special senses. Each section (other than the Introduction) is divided into several chapters. The authors of these chapters are experts in their respective fields, and were drawn from North America, Europe, and Asia.

The book appears to be directed at the health scientist and clinical investigator who already have some background in connective-tissue biochemistry and wish to consult a collection of reviews on glycosaminoglycans and proteoglycans in physiological and pathological processes. Some familiarity with elementary aspects of carbohydrate and polysaccharide chemistry is assumed, as virtually no discussion is presented on the biosynthesis and metabolic labeling of amino sugars and uronic acids, on sugar structures, and on nomenclature. Although this is not necessarily a fault, as such information is available from a number of sources, the uninitiated reader would have been better served had appropriate references and some limited guidance along these lines been provided in the Introduction.

The book provides a generally good survey of proteoglycans and glycosaminoglycans in terms of tissue distribution, aspects of function, and role in pathologic states. Discussions are limited to mammalian species, presumably in the interest of conciseness and coherence, but this is occasionally disadvantageous. A case in point is the omission of studies on the resorption of tadpole cartilage.

An unfortunate defect resulting from the organization of most of the book (into chapters along the lines of specific tissues and diseases) is that topics that encompass several areas sometimes get uneven treatment, and may even be "lost in the shuffle". Wound healing, for example, is discussed tersely under "skin", and at slightly greater length under "endocrinopathies", "arterial wall", and "cardiac tissue". A coherent discussion of the biology and biochemistry of wound healing is, however, absent. Moreover, little or no mention is made of experimental models, or of studies on replacement parts composed of collagen and glycosaminoglycans.

An alphabetized list of references consisting of authors' names, full title of article, and journal pages inclusive is provided at the end of each chapter. References generally extend to 1980, with the bulk of the references relating to work published in 1979 and earlier. A Subject Index is also provided. Cross-references are not employed within the body of the text, although the use of this device would have been

helpful to the reader. The quality of the photographs, illustrations, and formulas is good.

The price of this book places it out of the reach of the individual scientist and student, and purchase of this treatise will perforce be limited to libraries, research institutes, and specialized departments having sizable budgets for the acquisition of books.

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