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BIOCHEMICAL JOURNAL

REVIEWS 1989

Edited by P. J. England

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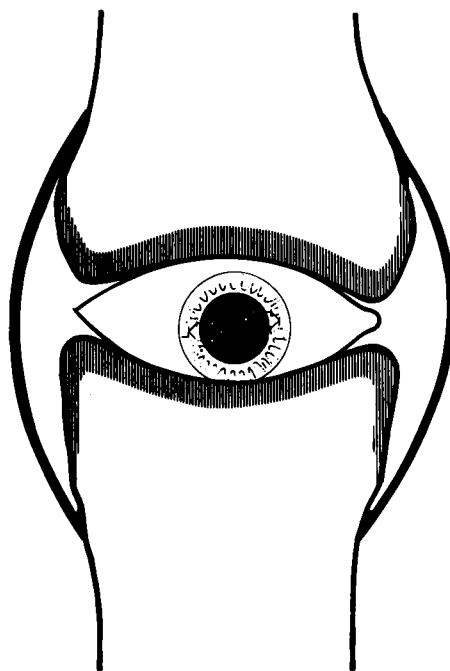
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Contents: **PART I - CHEMISTRY:** Structure of keratan sulphate proteoglycans: core proteins, linkage regions, carbohydrate chains (*Stuhlsatz, Keller, Becker, Oeben, Lennarts, Fisher & Greiling*); Structural and conformational analysis of keratan sulphate oligosaccharides and related carbohydrate structures (*Hounsell*); Discussion. **PART II - IMMUNOLOGY:** Keratan sulphate oligosaccharides, members of a family of antigens of the poly-N-acetyl-lactosamine series (*Feizi*); Studies of keratan sulphates of aorta and cartilage utilizing MAb 6D2 (*Baker*); Detection and purification of corneal keratan sulphate proteoglycan from non-corneal tissues (*Funderburgh & Conrad*); Discussion. **PART III - BIOSYNTHESIS:** Biosynthesis of skeletal and corneal keratan sulphate (*Balduini, De Luca & Castellani*); Keratan sulphate proteoglycans: chemistry and biosynthesis of the linkage regions (*Hascall & Kimura*); Discussion. **PART IV - REGULATION OF BIOSYNTHESIS:** Factors affecting the pathway for the biosynthesis of keratan sulphate (*Mason & Sweeney*); Sulphation, chain elongation and chain termination in keratan sulphate biosynthesis (*Keller, Stuhlsatz & Greiling*); Keratan sulphate: a functional substitute for chondroitin sulphate in O₂-deficient tissues? (*Scott, Stockwell, Balduini & De Luca*); Discussion. **PART V - DEGRADATION:** Substrate specificity of keratan sulphate-degrading enzymes (endo- β -galactosidase, keratanase and keratanase II) from micro-organisms (*Nakazawa, Ito, Yamagata & Suzuki*); Degradation of keratan sulphate proteoglycans (*Kresse*); Discussion. **PART VI - KERATAN SULPHATE IN THE TISSUES:** The chemical morphology of keratan sulphate proteoglycans (*Scott*); Articular cartilage keratan sulphate: maturation, ageing, biomechanical and scale effects (*Stockwell*); Proteoglycans of mammalian corneal stroma (*Damle & Gregory*); Discussion; Developmental aspects of keratan sulphate (*Cintron, Covington, Kublin, Gregory & Damle*); Keratan sulphate proteoglycans in organ and cell culture (*Dahl*); Discussion. **PART VII - CHEMICAL PATHOLOGY:** Studies of the metabolism of keratan-sulphate-bearing proteoglycans of cartilage (*Thonar, Williams, Sweet, Maldonado, Lenz, Schnitzer & Kuettnner*); Serum keratan sulphate in rheumatoid arthritis and different clinical subsets of osteoarthritis (*Seibel, Towbin, Braun, Kiefer, Müller & Paulsson*); Factors affecting the determination of keratan sulphate using monoclonal antibodies in immunoassay procedures (*Caterson, Brooks, Sattangi, Ratcliffe, Hardingham & Muir*); Discussion; Alterations in the synthesis of keratan sulphate proteoglycan in corneal wound healing and in macular corneal dystrophy (*Hassell, SundarRaj, Cintron, Midura & Hascall*); Distribution of keratan sulphate-containing proteoglycans in human aorta and their possible role in the calcification of aorta (*Greiling, Loffler & Stuhlsatz*); Discussion. *Bibliography. Index.*

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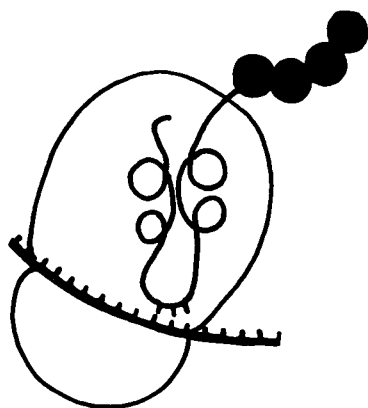
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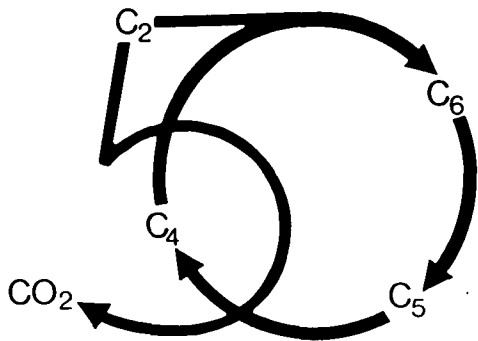
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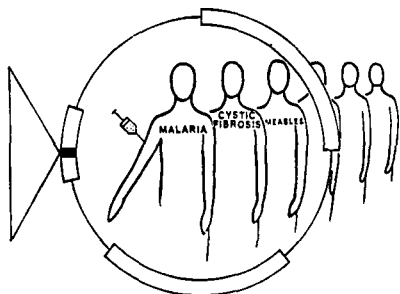
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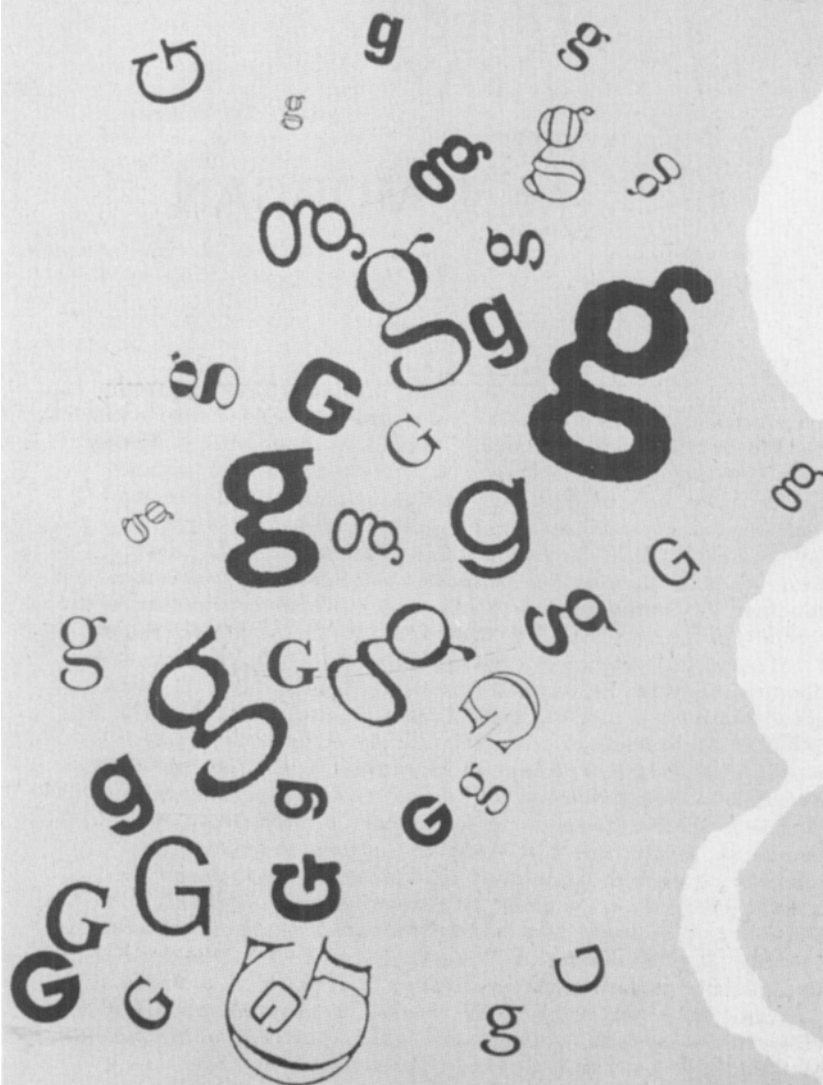


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