

more information than activity studies, and since close evolutionary homology between genes is neither a necessary nor a sufficient condition for shared enzymic activities of their products.

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Isozymes: Current topics in biological and medical research. Volume 16. Mario C. Rattazzi, John G. Scandalios & Gregory S. Whitt (eds). Alan R. Liss, Inc., New York. 1987. Pp. xiii + 290. Price £41.00. ISBN 08451 0256 6.

This volume in the Isozymes series is the third of three volumes which constitute the proceedings of the 5th International Congress on Isozymes held in Kos, Greece, in May 1986. The editors and publishers are to be congratulated on the speedy appearance of these volumes. Too often rapid publication of proceedings results in poor quality printing and reproduction: this is happily not the case here and the standard of reproduction is very high. An index is supplied and the contents of other volumes in the series are also listed.

A total of 15 articles are included, covering a very diverse selection of topics under the general umbrella of isozyme studies. Possibly the two articles likely to be of greatest general interest are those of Whitehouse and Hopkinson on sensitive techniques for the detection of genetic variation in human isozymes, which proposes that immunoblotting of electrophoretic gels overcomes some of the limitations of standard staining methods in the detection of isozymes, and Nevo on the uses of isozymes for studying plant genetic resources.

Other topics covered are baboon alcohol dehydrogenase (Holmes and VandeBerg), human aldehyde dehydrogenase (Agarwal and Goedde), modified β -hexosaminidase isozymes and lysosomal storage disease (Rattazzi and colleagues), human alkaline phosphatases (Moss), adenylate kinase isozymes in normal and Duchenne muscular dystrophy patients (Hamada and colleagues), isozymes as host-donor tracers following bone marrow transplantation (Meera Khan and colleagues), isozymes as disease resistance markers in plants (McMillin and Allan), heterosis and isozyme heterozygosity in maize (Tsaftaris & Efthimiadis), malate dehydrogenase in watermelon cotyledons (Gietl and Hock), lactate dehydrogenase and cytosolic pH of plant cells (Davies), heavy metals and isozyme expression in *Silene* (Verkleij, Lolkema, and Ernst), sugar phosphate metabolising isozymes in plants (Schnarrenberger), and plant peroxidases (van Huystee).

The range of technique and methods covered in these papers is impressive, and although restriction enzyme analysis of DNA is now the fashion, it is clear that the study of isozymes still has much to offer in many fields of biological research. I would, however, hesitate to

recommend this book for private purchase by anyone other than rich bibliophiles. The very specialised nature of many of the contributions means that few researchers using isozymes would find all the articles useful, although all researchers would find some articles of interest. This, along with the other volumes in the Isozymes series, is a volume for Departmental and University libraries.

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Molecular biology of *Homo sapiens*. Volume II (two book set) Cold Spring Harbor Symposia on Quantitative Biology. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York. 1987. Pp. xxiii + 1229. Price \$160.00 US HB; \$80.00 US PB. ISBN 0 87969 052 6 HB; 0 87969 053 4 PB.

This two volume set, comprising over 120 papers spanning some 1200 pages, is devoted to the proceedings of the 51st Cold Spring Harbor Symposium. The only previous symposium to be devoted specifically to *Homo sapiens* was the volume published in 1964 which dealt with Human Genetics and covered population genetics, somatic cell hybrids and human proteins. Since that time we have seen remarkable progress in the molecular field and this volume provides the current synopsis.

The contents are divided into seven major topics, four covered in Part 1 and the other three in Part 2. Part 1 commences with an informative/appealing introduction from W. F. Bodmer (appealing since it makes a case for Project 2000, the complete characterization of the human genome by the end of this century). There follows sections on the human gene map, genetic diagnosis and the development of new methods for the determination of single gene disorders, human molecular evolution and finally the use of recombinant DNA technology in the generation of growth, clotting and anti-clotting factors and anti-cancer agents.

The second Part covers receptors, human cancer genes, including a fine section on oncogenes and cancer, and the prospects of gene therapy. The volume ends with a summary of the meeting by Caskey. In addition there is an eighty page appendix collated by McKusick which provides current information about the human gene map.

There can be no doubt that this volume will provide a useful reference not only for workers in these areas but also for those keen to keep up with developments. Of course most of the material has been published elsewhere, but its appearance in review form in a single volume underlines the tremendous strides taken as well as the immense scope of this whole field for the future of human biology and medicine. Of course, in collected volumes it is not always possible to provide a complete overview and there are two obvious omissions; hardly