

Recently Published Papers in the Field of Molecular Evolution

Australian Journal of Biological Sciences

26 No. 6 (December) 1973

Studies on monotreme proteins. III. Amino acid sequence of the α - and β -globin chains of the minor haemoglobin from the echidna, *Tachyglossus aculeatus aculeatus*. Thompson, E. O. P., *et al.* (School of Biochemistry, University of New South Wales, P.O. Box 1, Kensington, N.S.W. 2033, USA) — p. 1327

The Biochemical Journal Molecular Aspects

135 No. 4 (December) 1973

A comparison of the physical and chemical properties of four cytochromes *c* from *Azotobacter vinelandii*. Campbell, W. H., *et al.* (Dept. of Biochemistry, College of Agricultural and Life Sciences, University of Wisconsin-Madison, Madison, Wis. 53706, USA) — p. 617

The amino acid sequence of cytochrome *c'* from *Alcaligenes* sp. N.C.I.B. 11015. Ambler, R. P. (Dept. of Molecular Biology, University of Edinburgh, Edinburgh EH9 3JR, United Kingdom) — p. 751

Nucleotide sequence analysis of the cytoplasmic 5S ribosomal ribonucleic acid from five species of flowering plants. Payne, P. I., *et al.* (Agricultural Research Council Unit of Developmental Botany, 181 A Huntingdon Road, Cambridge CB3 ODY, United Kingdom) — p. 845

Biochemistry

12 No. 19 (September) 1973

Comparison of human hemoglobin A carrying glutathione as a mixed disulfide with the naturally occurring human hemoglobin A₃. Birchmeier, W., *et al.* (Biochemisches Institut der Universität, CH-8032 Zürich, Switzerland) — p. 3667

12 No. 21 (October) 1973

Evolutionary stability of the histone genes of sea urchins. Farquhar, M. N., McCarthy, B. J. (Depts. of Biochemistry and Genetics, University of Washington, Seattle, Wash. 98195, USA) — p. 4113

Biochimica et Biophysica Acta (P) (Amsterdam) Protein Structure

328 No. 1 (November) 1973

Hemoglobin Beograd or $\alpha_2\beta_2^{121\text{Glu}\rightarrow\text{Val}(\text{GH}^4)}$. Efremov, G. D., *et al.* (Laboratory of Physiology and Biochemistry, Faculty of Agriculture, and Dept. of Pediatrics, Faculty of Medicine, University of Skopje, Yugoslavia; Dept. of Internal Medicine "B", Faculty of Medicine, Beograd, Yugoslavia; and Laboratory of Protein Chemistry, Comprehensive Sickle Cell Center, Dept. of Cell and Molecular Biology, Medical College of Georgia, Augusta, Ga. 30902, USA) — p. 81

Comparative Biochemistry and Physiology

47 No. 2A (February) 1974

Evolution in ground squirrels — I. Transferrins in Holarctic populations of *Spermophilus*. Nadler, Ch. F., *et al.* (Dept. of Medicine, Northwestern University Medical School, Chicago, Ill. 60611, USA; Institute of Cytology and Genetics, Siberian Branch, USSR Academy of Sciences, Novosibirsk, USSR; Museum of Natural History, University of Kansas, Lawrence, Kansas 66044, USA; and Institute of Biology and Pedology, Far East Center, USSR Academy of Sciences, Vladivostok, USSR) — p. 663

European Journal of Biochemistry

39 No. 1 (November) 1973

The amino-acid sequence of the αA_2 chain of bovine α -crystallin. Van der Ouderaa, F. J., *et al.* (Laboratorium voor Biochemie, Universiteit van Nijmegen, Nijmegen, The Netherlands) — p. 207

The primary structure of the porcine luteinizing-hormone α -subunit. Maghuin-Rogister, G., *et al.* (Section d'Endocrinologie, Département de Clinique et de Séméiologie Médicales, Institut de Médecine, Université de Liège, Belgium) — p. 255

Evolution of ribosomal proteins. Delaunay, J., *et al.* (Institut de Pathologie Moléculaire, 24, Rue du Faubourg-St-Jacques, F-75014 Paris, France) — p. 305

39 No. 2 (November) 1973

Studies on the properties of fish hemoglobins. Molecular properties and interaction with third components of the isolated hemoglobins from trout (*Salmo irideus*). Brunori, M., *et al.* (Laboratory of Molecular Biology, Institute of Biochemistry, University of Camerino, Camerino, and Consiglio Nazionale delle Ricerche, Centre of Molecular Biology, Institutes of Biochemistry and Chemistry, Faculty of Medicine, University of Rome, Rome, Italy) — p. 563

Purification and molecular properties of yeast hemoglobin. Oshino, R., *et al.* (Johnson Research Foundation, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania 19104, USA; and Dept. of Biochemistry, Osaka University Medical School, Joan-Cho, Kita-Ku, Osaka 530, Japan) — p. 581

40 No. 2 (December) 1973

Phylogeny of the neurohypophysial hormones. The active peptides of a primitive fish, the sturgeon (*Acipenser* sp.). Acher, R., *et al.* (Laboratoire de Chimie Biologique, Université de Paris VI, 96 Boulevard Raspail, F-75006 Paris, France) — p. 585

FEBS Letters (Amsterdam)

37 No. 2 (December) 1973

Acidic ribosomal proteins from the extreme halophile, *Halobacterium cutirubrum*. The simultaneous separation, identification and molecular weight determination. Strøm, A. R., Visentin, L. P. (Division of Biological Sciences, National Research Council of Canada, Ottawa, KIA OR6, Canada) — p. 274

Penguin (*Aptenodytes forsteri*) myoglobin. A 70 residue N-terminal sequence. Peiffer, S., *et al.* (Laboratoire de Chimie Générale I, Faculté des Sciences, Université Libre de Bruxelles, Belgium) — p. 295

Nucleotide sequence of *Chlorella* cytoplasmic 5 S RNA. Jordan, B. R., *et al.* (Centre de Biochimie et de Biologie Moléculaire, C.N.R.S., 31, Chemin Joseph Aiguier, F-13274 Marseille, France) — p. 333

38 No. 2 (January) 1974

Amino acid sequences of two glycopeptides isolated from tryptic and chymotryptic hydrolysates of human lactotransferrin. Spik, G., *et al.* (Laboratoire de Chimie Biologique, Université des Sciences et Techniques de Lille I, B.P. no. 36, F-59650 Villeneuve d'Ascq, and Laboratoire de Chimie Biologique, Faculté de Médecine, Place de Verdun, F-59045 Lille Cedex, France) — p. 213

38 No. 3 (January) 1974

Amino acid sequence of the N-terminal 158 residues of rabbit muscle aldolase. Sajgó, M., Hajós, Gy. (Enzymology Dept., Institute of Biochemistry, Hungarian Academy of Sciences, P.O. Box 7, H-1502 Budapest, Hungary) — p. 341

Hoppe-Seyler's Zeitschrift für Physiologische Chemie**354 No. 12 (December) 1973**

Über ϵ -Markierung von Peptiden. Automatische Sequenzanalyse des Insulins. Braunitzer, G., *et al.* (Max-Planck-Institut für Biochemie, Am Klopferspitz 4, D-8033 München-Martinsried, and Fa. Bayer AG, Wiss. Hauptlaboratorium, D-5090 Leverkusen-Bayerwerk, Federal Republic of Germany) — p. 1563

International Journal of Peptide and Protein Research**5 No. 5 1973**

A study of the cystine residues in *Bombyx mori* and other silks. Earland, Ch., Robins, S. P. (Postgraduate School of Fibre Science, The University, Bradford, Yorkshire, England) — p. 327

The Journal of Biochemistry**74 No. 3 (September) 1973**

Neutral and amino sugar composition of thyroglobulin. Comparison of the compositions of different fractions of hog thyroglobulin and of thyroglobulins from various animal species. Ui, N. (Dept. of Physical Biochemistry, Institute of Endocrinology, Gunma University, Showa-machi, Maebashi, Japan) — p. 593

The Journal of Biological Chemistry**248 No. 20 (October) 1973**

NH₂-terminal sequences of mammalian plasminogens and plasmin S-carboxymethyl heavy (A) and light (B) chain derivatives. A re-evaluation of the mechanism of activation of plasminogen. Robbins, K. C., *et al.* (Biochemistry Section, Blood Center, Dept. of Medicine, Michael Reese Hospital and Medical Center, Chicago, Ill. 60616, and Dept. of Medicine, The Pritzker School of Medicine, The University of Chicago, Chicago, Ill. 60637, USA) — p. 7242

The chemical characterization of calf brain microtubule protein subunits. Lee, J. C., *et al.* (Graduate Dept. of Biochemistry, Brandeis University, and Pioneering Research Laboratory of Physical Biochemistry, United States Dept. of Agriculture, Eastern Marketing and Nutrition Research Division, Agricultural Research Service, Waltham, Mass. 02154, USA) — p. 7253

Nature

246 No. 5427 (November) 1973

Possibilities for the evolution of the genetic code from a preceding form. Jukes, T. H. (Space Sciences Laboratory, University of California, Berkeley, Calif. 94720, USA) — p. 22

246 No. 5433 (December) 1973

Molecular evolution of myoglobin and the fossil record: a phylogenetic synthesis. Romero-Herrera, A. E., *et al.* (MRC Abnormal Haemoglobin Unit, University Dept. of Biochemistry, Addenbrooke's Hospital, Hills Road, Cambridge CB2 2QR, and University Museum of Zoology, Downing Street, Cambridge CB2 3EJ, Great Britain) — p. 389

Naturwissenschaften

60 No. 10 1973

Evolution of the genetic code. Woese, C. R. (Dept. of Microbiology, University of Illinois, Urbana, Ill. 61801, USA) — p. 447

Paläobiochemische Aspekte der Evolution, Heller, W. (Chirurgische Klinik und Poliklinik der Universität, D-7400 Tübingen, Federal Republic of Germany) — p. 460

**Proceedings of the National Academy of Sciences
of the United States of America**

70 No. 11 (November) 1973

D-Glyceraldehyde-3-phosphate dehydrogenase: Three-dimensional structure and evolutionary significance. Buehner, M., *et al.* (Dept. of Biological Sciences, Purdue University, West Lafayette, Ind. 47907, USA) — p. 3052

Relatedness among contractile and membrane proteins: Evidence for evolution from common ancestral genes. Weltman, J. K., Dowben, R. M. (Dept. of Medicine, The Miriam Hospital, and Division of Biomedical Sciences, Brown University, Providence, Rhode Island 02912, USA) — p. 3230