

Recently Published Papers in the Field of Molecular Evolution

Biochemical and Biophysical Research Communications

57 No. 3 (April) 1974

Mechanical stability of hemoglobin subunits: An abnormality in β^S -subunits of sickle hemoglobin. Asakura, T., *et al.* (Johnson Research Foundation and Dept. of Pediatrics, University of Pennsylvania, Philadelphia, Pennsylvania 19174, USA)— p. 780

The Biochemical Journal Molecular Aspects

137 No. 1 (January) 1974

The evolutionary stability of cytochrome *c*-551 in *Pseudomonas aeruginosa* and *Pseudomonas fluorescens* biotype C. Ambler, R. P. (Dept. of Molecular Biology, University of Edinburgh, Edinburgh EH9 3JR, Scotland) — p. 3

The amino acid sequences of cytochrome *c* from four plant sources. Brown, R. H., Boulter, D. (Dept. of Botany, University of Durham, Durham DH1 3LE, England) — p. 93

Biochemical Systematics

1 No. 4 (December) 1973

Chemotaxonomy of the *Oscillatoria-Phormidium* complex. Klein, S., *et al.* (The University of Chicago, Barnes Laboratory, Division of Biological Sciences, Chicago, Illinois 60637, and University of California, Dept. of Biology, Los Angeles, California 90024, USA) — p. 173

Malat-Dehydrogenase Isoenzymbanden als potentielles chemotaxonomisches Kriterium für Cyanophyceen-Species. Schenk, H. E. A., *et al.* (Institut für Chemische Pflanzenphysiologie der Universität, D-7400 Tübingen, Federal Republic of Germany) — p. 179

The constitution of the Order Centrospermae: *r*RNA-DNA hybridization studies among betalain- and anthocyanin-producing families. Chang, Ch. P., Mabry, T. J. (Cell Research Institute and Dept. of Botany, University of Texas at Austin, Austin, Texas 78712, USA) — p. 185

A comparison of the tryptic peptides of hemoglobin from *Microtus tananaensis*, *Mus musculus* and man. Genaux, Ch., Morrison, P. (Institute of Arctic Biology and Dept. of Chemistry, University of Alaska, Fairbanks, Alaska 99701, USA) — p. 211

A comparison of hemoglobins in five species of *Microtus*. Genaux, Ch. T., Morrison, P. (Institute of Arctic Biology and Dept. of Chemistry, University of Alaska, Fairbanks, Alaska 99701, USA) — p. 221

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13 No. 3 (January) 1974

Cytochrome b_5 from microsomal membranes of equine, bovine, and porcine livers. Isolation and properties of preparations containing the membraneous segment. Ozols, J. (Dept. of Biochemistry, School of Medicine, University of Connecticut Health Center, Farmington, Connecticut 06032, USA) — p. 426

Human placental tryptophanyl transfer ribonucleic acid synthetase. Purification and subunit structure. Penneys, N. S., Muench, K. H. (Depts. of Biochemistry, Dermatology, and Medicine, University of Miami School of Medicine, and the Veterans Administration Hospital, Miami, Florida 33152, USA) — p. 560

Human tryptophanyl transfer ribonucleic acid synthetase. Comparison of the kinetic mechanism to that of the *Escherichia coli* tryptophanyl transfer ribonucleic acid synthetase. Penneys, N. S., Muench, K. H. (Depts. of Biochemistry, Dermatology, and Medicine, University of Miami School of Medicine, and the Veterans Administration Hospital, Miami, Florida 33152, USA) — p. 566

Biochimica et Biophysica Acta (P)

342 No. 2 (April) 1974

Purification and characterization of glycine, arginine, lysine-rich and alanine, leucine, glycine-rich histones from sea urchin gonad. Wouters-Tyrou, D., *et al.* (Institut de Recherches sur le Cancer, et U124 INSERM, B. P. 3567, F-59020 Lille Cedex, France) — p. 360

The Botanical Review

Interpreting Botanical Progress

39 No. 4 (October—December) 1973

The origins of the genetic code. Dillon, L. S. (Dept. of Biology, Texas A & M University, College Station, Texas 77843, USA) — p. 301

Comparative Biochemistry and Physiology

47 No. 3B (March) 1974

Comparative studies on serum lipoprotein and lipid profiles in subhuman primates. Srinivasan, S. R., *et al.* (Depts. of Medicine and Biochemistry, Louisiana State University, School of Medicine, New Orleans, Louisiana 70112, USA) — p. 711

47 No. 4B (April) 1974

Comparative study of several proteins of the transferrin class. Bezkorovainy, A., Grohlich, D. (Dept. of Biochemistry, Rush Medical College, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Illinois 60612, USA) — p. 787

European Journal of Biochemistry

43 No. 1 (March) 1974

The amino-acid sequence of porcine adenylate kinase from skeletal muscle. Heil, A., *et al.* (Max-Planck-Institut für Medizinische Forschung, Jahnstr. 29, D-6900 Heidelberg, Federal Republic of Germany; and Dept. of Biochemistry, Dartmouth Medical School, Hanover, New Hampshire 03755, USA) — p. 131

Immunochemical homologies among vertebrate lactate dehydrogenase isozymes. Holmes, R. S., Scopes, R. K. (Dept. of Biochemistry, La Trobe University, Bundoora, Victoria 3083, Australia) — p. 167

FEBS Letters

40 No. 1 (March) 1974

Phylogenetic distance between prokaryotes and eukaryotes as evaluated by ribosomal proteins. Delaunay, J., Schapira, G. (Institut de Pathologie Moléculaire, 24, rue du Faubourg Saint-Jacques, Paris 14e, France) — p. 97

- The sequence of residues 1—26 of human serum transferrin. Sutton, M. R., Brew, K. (Dept. of Biochemistry, University of Leeds, 9 Hyde Terrace, Leeds LS2 9LS, England) — p. 146
- Partial amino acid sequence of two new arginine-serine rich histones from male gonads of the sea urchin (*Parechinus angulosus*). Strickland, W. N., *et al.* (Dept. of Biochemistry, University of Cape Town, Rondebosch, Cape Town, South Africa) — p. 161
- Comparison of the N-terminal amino acid sequences of histone F3 from a mammal, a bird, a chark, an echinoderm, a mollusc and a plant. Brandt, W. F., *et al.* (Dept. of Biochemistry, University of Cape Town, Rondebosch, Cape Town, South Africa) — p. 167

40 No. 2 (April) 1974

- Sequence of the cysteine-containing portion of histone F2a1 from the sea urchin *Parechinus angulosus*. Strickland, M., *et al.* (Dept. of Biochemistry, University of Cape Town, Rondebosch, Cape Town, South Africa) — p. 346
- The primary structure of histone F3 from shark erythrocytes. Brandt, W. F., *et al.* (Dept. of Biochemistry, University of Cape Town, Rondebosch, Cape Town, South Africa) — p. 349

General and Comparative Endocrinology

22 No. 3 (March) 1974

- Molecular aspects in comparative endocrinology. Heller, H. (Dept. of Anatomy, The Medical School, University of Bristol, Bristol BS8 1TD, England) — p. 315

The Journal of Biological Chemistry

249 No. 3 (February) 1974

- Structural analyses of mammalian ribosomal ribonucleic acid and its precursors. The distribution of polypyrimidine sequences in ribosomal 28 S ribonucleic acid. Nazar, N. R., Busch, H. (Tumor By-Products Laboratory, Dept. of Pharmacology, Baylor College of Medicine, Houston, Texas 77025, USA) — p. 919

Journal of Medical Genetics

11 No. 1 (March) 1974

- Haemoglobin F Malaysia: $\alpha_2\gamma_2$ 1 (NA 1) glycine \rightarrow cysteine; 136 glycine. Luan Eng, L.-I., *et al.* (Institute of Medical Research, International Center for Medical Research (UC ICMR), Kuala Lumpur, Malaysia; and Medical Research Council Abnormal Haemoglobin Unit, University Dept. of Biochemistry, Addenbrooke's Hospital, Hills Road, Cambridge, England) — p. 25

Journal of Theoretical Biology

44 No. 1 (March) 1974

- On earlier states of the biochemical system. Yčas, M. (Dept. of Microbiology, Upstate Medical Center, State University of New York, Syracuse, New York 13210, USA) — p. 145

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247 No. 5442 (February) 1974

- Nucleotide sequence of rabbit liver and sheep mammary gland cytoplasmic initiator transfer RNAs. Simsek, M., *et al.* (Dept. of Biology, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139, USA; and Laboratoire de Physiologie de la Lactation, Centre National de Recherches Zootechniques, Jouy-en-Josas, France) — p. 518

249 No. 5456 (May) 1974

Outline structure of cytochrome c_3 and consideration of its properties. Dobson, C. M., *et al.* (Inorganic Chemistry Laboratory, Oxford, England; and Laboratoire de Chimie Bacterienne, CNRS, Marseille, France) — p. 425

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

71 No. 2 (February) 1974

Transfer RNA biosynthesis: The nucleotide sequence of a precursor to serine and proline transfer RNAs. Barrell, B. G., *et al.* (MRC Laboratory of Molecular Biology, Cambridge, England; and Dept. of Bacteriology, The University of Wisconsin, Madison, Wisconsin 53706, USA) — p. 413

71 No. 3 (March) 1974

Evolution and the distribution of glutamyl and asparagyl residues in proteins. Robinson, A. B. (Institute of Orthomolecular Medicine, 2700 Sand Hill Road, Menlo Park, California 94025, USA) — p. 885

Systematic Zoology

22 No. 4 (December) 1973

Phylogeny of hemoglobin. Goodman, M., Moore, G. W. (Dept. of Anatomy, Wayne State University, Medical Research Building, 550 E. Canfield Ave., Detroit, Michigan 48201, USA) — p. 508

Evolutionary aspects of the structure of muscular parvalbumins. Pechère, J.-F., *et al.* (Département de Biochimie Macromoléculaire du CNRS, Montpellier, France; and Laboratoire de Biochimie Médicale, Faculté de Médecine et de Pharmacie, Université de Dakar, Dakar, Sénégal) — p. 533

Amino acid sequences of cytochrome c and plastocyanins in phylogenetic studies of higher plants. Boulter, D. (Dept. of Botany, University of Durham, Durham, England) — p. 549

Bacterial cytochromes c and molecular evolution. Ambler, R. P. (Dept. of Molecular Biology, University of Edinburgh, Edinburgh EH9 3JR, Scotland) — p. 554

Mistletoe toxins. Samuelsson, G. (Dept. of Pharmacognosy, Faculty of Pharmacy, Lindhagensgatan 128, S-112 51 Stockholm, Sweden) — p. 566

The evolution of iron-sulfur protein containing organisms. Yasunobu, K. T., Tanaka, M. (Dept. of Biochemistry-Biophysics, University of Hawaii, Honolulu, Hawaii 96822, USA) — p. 570

Mammalian phylogeny based on fibrinopeptide amino acid sequences. O'Neil, P. B., Doolittle, R. F. (Depts. of Biology and Chemistry, University of California, San Diego, La Jolla, California 92037, USA) — p. 590

Snake venom toxins: The evolution of some of the toxins found in snake venoms. Strydom, D. J. (National Chemical Research Laboratory, Council for Scientific and Industrial Research, P. O. Box 395, Pretoria, South Africa) — p. 596