

## Recently Published Papers in the Field of Molecular Evolution

*Acta Biologica et Medica Germanica*

34 No.7 1975

Discontinuity of the large ribosomal subunit RNA and rRNA molecular weights in eukaryote evolution. Cammarano, P., et al. (Laboratorio di Radiobiologia Animale, CSN Casaccia, CNEN, Roma, Italy; II cattedra di Biologia generale, Università di Roma) - p. 1123

*Biochemical Genetics*

13 No.7/8 (August) 1975

Hb Mobile [ $\alpha_2\beta_2$  73(E17)Asp  $\rightarrow$  Val]: A New Variant. Schneider, Rose G., et al. (Department of Pediatrics, University of Texas Medical Branch, Galveston, Texas) - p. 411

*The Biochemical Journal*

149 No.1 (July) 1975

The Amino Acid Sequence of the  $\alpha$  Chain of the Major Haemoglobin of the Rat (*Rattus norvegicus*). Chua, Ching Geh, et al. (Department of Pathology, Christchurch Hospital, Christchurch, New Zealand) - p. 259

The Amino Acid Sequence of Cytochrome f from the Brown Alga *Alaria esculenta* (L.) Grev. (Atlantic Regional Laboratory, National Research Council of Canada, Halifax, Nova Scotia B3H 3Z1, Canada) - p. 271

151 No.2 (November) 1975

The Amino Acid Sequence of *Staphylococcus aureus* Penicillinase. Ambler, R.P. (Department of Molecular Biology, University of Edinburgh, Edinburgh EH9 3JR, U.K.) - p. 197

*Biochemistry*

14 No.18 (September) 1975

Rotational Allomerism and Divergent Evolution of Domains in Immunoglobulin Light Chains. Edmundson, A.B., et al. (Division of Biological and Medical Research, Argonne National Laboratory, Argonne, Illinois 60439) - p. 3953

*Biochimie*

57 No.6/7 (Octobre) 1975

The determination of the primary structure of the 16S ribosomal RNA of *Escherichia coli*. III. Further studies. Ehresmann, Chantal, et al. (Institut de Biologie Moléculaire et Cellulaire du CNRS, 15 rue Descartes, Strashbourg, France) p. 711

Probable identity of the  $\beta$  chains from the two chicken hemoglobin components. Vandecasserie, C., et al. (Laboratoire de Chimie Générale I, Faculté des Sciences, Université libre de Bruxelles, 1050 Bruxelles, Belgique) - p. 843

*Bioorganic Chemistry*

4 No.3 (September) 1975

Amino Acids and Peptides. XLI. A Possible Active Site Homology between Carbonic Anhydrase and  $\beta$ -Lipotropin Hormone. Weinstein, Boris, Bartschot, Rita M. (Department of Chemistry, University of Washington, Seattle, Washington 98195) p. 290

*Canadian Journal of Botany*

53 No.16 (August) 1975

A new fossil plant of probable intermediate affinities (Trimerophyte - Progymnosperm). Andrews, Henry N., et al. (University of Connecticut, Storrs, Connecticut 06268) - p. 1719

*Cell*

5 No.4 (August) 1975

The Amino Acid Sequence of Thymopoietin II. Schlesinger, David H., Goldstein, Gideon (Endocrine Unit, Massachusetts General Hospital, Boston, Mass. 02114) - p. 361

*Differentiation*

3 Nos.1-3 (August) 1975

Relation of an Evolutionary Mechanism to Differentiation. Flickinger, R. (Division of Cell and Molecular Biology, Cary Hall, State University of New York, Buffalo, New York 14214) - p. 155

*European Journal of Biochemistry*

57 No.2 1975

On the Primary Structure of Human Plasminogen and Plasmin. Purification and Characterization of Cyanogen-Bromide Fragments. Wiman, Björn, Wallén, Per (Department of Physiological Chemistry, Umeå University, S-901 87 Umeå, Sweden) - p. 387

Amino-Acid Composition of the Covalent Rigid-Layer Lipoprotein in Cell Walls of *Proteus mirabilis*. Gruss, Peter, et al. (Fachbereich Biologie/Mikrobiologie, Technische Hochschule Darmstadt, D-6100 Darmstadt, Federal Republik of Germany) - p. 411

Similarities and Differences of Five Peroxidases from Turnip and Horseradish. Peptide Mapping Studies on Glycoproteins. Welinder, Karen Gjesing, and Mazza, Gilbert (Institute of Biochemical Genetics, University of Copenhagen, DK-1353 Copenhagen, Denmark) - p. 415

58 No.1 1975

Amino-Acid Sequence of Toxin III of *Naja haje*. Kopeyan, Charles, et al. (Laboratoire de Biochimie, Faculté de Médecine, Secteur Nord et Unité 38 de l'Institut National de la Santé et de la Recherche Médicale Marseille, F-13326 Marseille-Cedex-3, France) - p. 117

*FEBS Letters*

58 No.1 (October) 1975

Haemoglobin Volga, B27, (B9) Ala → Asp, a New Highly Unstable Haemoglobin with a Suppressed Charge. Idelson, L.I., et al. (Central Hospital, Ministry of Transport, Pogon-Losinoostrovskaja Street, Moscow, USSR) - p. 122

Complete Amino Acid Sequence of Human Serum Albumin. Meloun, B., et al. (Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, 166 10 Prague 6, Czechoslovakia) - p. 134

Hemoglobin Castilla  $\beta 32$  (B14) Leu  $\rightarrow$  Arg; A New Unstable Variant Producing Severe Hemolytic Disease. Garel, M.C., et al. (Unité de Recherches sur les Anémies I.N.S.E.R.M.U 91, Hôpital Henri Mondor 94010 Créteil, France) - p. 145

Hemoglobin C Ziguinchor  $\alpha_2^A \beta_2^6$  (A3) Glu  $\rightarrow$  Val  $\beta^{58}$  (E2) Pro  $\rightarrow$  Arg; The Second Sickling Variant with Amino Acid Substitutions in 2 Residues of the  $\beta$  Polypeptide Chain. Goossens, M., et al. (Unité de Recherches sur les Anémies, I.N.S.E.R.M.U 91, Hôpital Henri Mondor, 94010 Créteil, France) - p. 149

Hb Serbia ( $\alpha 112$ (G19) His  $\rightarrow$  ARG), A New Haemoglobin Variant from Yugoslavia. Beksedić, D., et al. (The Institute of Blood Transfusion, Beograd, Yugoslavia) - p. 226

The Complete Amino Acid Sequence of the Major Ovine Neurophysin (MSEL-Neurophysin); Comparison with a RE-Investigated Bovine MSEL-Neurophysin. Chauvet, Marie-Thérèse, et al. (Laboratory of Biological Chemistry, 96, Bd Raspail, 75006 Paris, France) - p. 234

A New Unstable Hemoglobin Mutated in  $\beta 98$  (FG 5) Val  $\rightarrow$  Ala: Hb Djelfa. Gacon, Gérard, et al. (Institut de Pathologie Moléculaire, Unité 15 INSERM, CHU Cochin, 24, rue du faubourg Saint-Jacques, 75014 Paris, France) - p. 238

The Amino Acid Sequence of the A Chain of Human  $\alpha$ -Crystallin. de Jong, Wilfried W., et al. (Laboratorium voor Biochemie, Universiteit van Nijmegen, Nijmegen, The Netherlands) - p. 310

*Hoppe-Seyler's Zeitschrift für Physiologische Chemie*

356 No.10 (Oktober) 1975

Die Aminosäuresequenz des doppelköpfigen Proteinasen-Inhibitors aus der Glandula submandibularis des Hundes. I. Strukturelle Homologie zu den sekretorischen Trypsin-Inhibitoren der Bauchspeicheldrüse. Hochstrasser, Karl, Fritz, Hans. (Hals-Nasen-Ohrenklinik der Universität München, D-8 München, Pettenkoferstr. 4a) - p. 1659

*The Journal of Biological Chemistry*

250 No.15 (August) 1975

Primary Structure of Human Fibrinogen and Fibrin. Isolation and Partial Characterization of Chains of Fragment D. Collen, Désiré, et al. (Department of Blood Coagulation Research,

Karolinska Institutet, S-104 01 Stockholm 60, Sweden) -  
p. 5808

The Primary Structure of Actin from Rabbit Skeletal Muscle. Five Cyanogen Bromide Peptides, Including the NH<sub>2</sub> and COOH Termini. Elzinga, Marshall, Collins, John H. (Boston Biomedical Research Institute, Boston, Massachusetts 02114) -  
p. 5897

The Primary Structure of Actin from Rabbit Skeletal Muscle. Three Cyanogen Bromide Peptides that are Insoluble at Neutral pH. Collins, John H., Elzinga, Marshall (Boston Biomedical Research Institute, Boston, Massachusetts 02114) - p. 5906

The Primary Structure of Actin from Rabbit Skeletal Muscle. Completion and Analysis of the Amino Acid Sequence. Collins, John H., Elzinga, Marshall (Boston Biomedical Research Institute, Boston, Massachusetts 02114) - p. 5915

Amino Acid Sequence of a Vitamin K-dependent Ca<sup>2+</sup>-Binding Peptide from Bovine Prothrombin. Howard, James Bryant, et al. (Department of Biochemistry, College of Medical Sciences, University of Minnesota, Minneapolis, Minnesota 55455) -  
p. 6178

250 No.16 (August) 1975

Amino Acid Sequence Homology of Mammalian Type C RNA Virus Major Internal Proteins. Oroszlan, Stephen, et al. (Flow Laboratories, Inc., Rockville, Maryland 20852) - p. 6232

Guinea Pig Proinsulin. Primary Structure of the C-Peptide Isolated from Pancreas. Massey, Derek E., Smyth, Derek G. (National Institute for Medical Research, Mill Hill, London NW7 1AA, England) - p. 6288

Proinsulin: A Proposed Three-Dimensional Structure. Snell, Christopher R., Smyth, Derek G. (National Institute for Medical Research, Mill Hill, London NW7 1AA, England) -  
p. 6291

*Journal of Theoretical Biology*

53 No.2 (September) 1975

Magnolia Seed Carotenoid Pigments: Typical Evolutionarily-Static Relicts? Bauman, A.J., Yokoyama, Henry (Bioscience Section, Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, California 91103, USA) - p. 277

*Molecular and Cellular Biochemistry*

8 No.3 (September) 1975

Information Contained in the Amino Acid Sequence of the  $\alpha 1(1)$ -Chain of Collagen and its Consequences upon the Formation of the Triple Helix, of Fibrils and Crosslinks.

Fietzek, Peter P., Kühn, Klaus (Max-Planck-Institut für Biochemie, 8033 Martinsried bei München, Germany) - p. 141

*Nature*

257 No.5526 (October) 1975

Organisation and evolution of *Drosophila virilis* heterochromatin.

Holmquist, Gerald (Department of Medical Genetics, City of Hope National Medical Center, Duarte, California 91010) - p. 503

257 No.5527 (October) 1975

Thermodynamic activation parameters of fish myofibrillar ATPase enzyme and evolutionary adaptations to temperature.

Johnston, I.A., Goldspink, G. (Research Unit for Comparative Animal Respiration, University of Bristol, Bristol BS8 1UG, U.K.) - p. 620

*Phytochemistry*

14 No.7 (July) 1975

Cytochrome cs from *Rhodomenia palmata* and *Porphyra umbilicalis* and the Amino Acid Sequences of their N-Terminal Regions.

Meatyard, Barry T., et al. (Department of Botany, University of Durham, Durham DH1 3LE, England) - p. 1493

14 No.9 (September) 1975

The Amino Acid Sequence of Cytochrome c from Niger-Seed,

*Guizotia abyssinica*. Ramshaw, John A., Boulter, Donald (Department of Botany, University of Durham, Durham City DH1 3LE, England) - p. 1945

*Proceedings of the National Academy of Sciences*

72 No.8 (August) 1975

Amino-acid sequence and oligosaccharide attachment sites of human erythrocyte glycophorin. Tomita, Motowo, Marchesi, Vincent T. (Department of Pathology, Yale University School of Medicine, New Haven, Conn. 06510) - p. 2964

Bovine factor X<sub>1</sub> (Stuart Factor): Amino-acid sequence of heavy chain. Titani, K., et al. (Department of Biochemistry, University of Washington, Seattle, Wash. 98195) - p. 3082

Acetylcholine receptors at neuromuscular synapses: Phylogenetic differences detected by snake  $\alpha$ -neurotoxins. Burden, Steven J., et al. (Department of Zoology, University of Wisconsin, Madison, Wisc. 53706) - p. 3245

72 No.9 (September) 1975

Nucleotide sequences of the 3'-terminal untranslated region of messenger RNA for human beta globin chain. Forget, Bernard G., et al. (Division of Hematology-Oncology of the Department of Medicine, Children's Hospital Medical Center, and the Department of Pediatrics, Harvard Medical School, Boston, Massachusetts 02115) - p. 3614

Constancy of amino-terminal amino-acid sequences of antibodies of defined specificity and shared idiootype from individual inbred mice. Friedenson, Bernard, et al. (Department of Biological Chemistry, University of Illinois College of Medicine, Chicago, Ill. 60612) - p. 3676

Group selection, altruism, reinforcement, and throwing in human evolution. Darlington, P.J., Jr. (Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138) p. 3748

*Science*

190 No.4211 (October) 1975

<sup>18</sup>O Changes in Foraminifera Carbonates during the Last 10<sup>5</sup> Years in the Mediterranean Sea. Grazzini, C. Vergnaud. (Laboratoire de Géologie Dynamique, Associé au Centre National de la Recherche Scientifique, 4, Place Jussieu, 75005 Paris, France) - p. 274

*South African Journal of Science*

71 No.8 (August) 1975

Limulid Trackways in the Late Palaeozoic Ecca Sediments and their Palaeoenvironmental Significance. Anderson, Ann M. (Bernard Price Institute for Palaeontological Research, University of the Witwatersrand, Johannesburg 2001) - p. 249