

Announcements

31st ANNUAL COLLOQUIUM "PROTIDES OF THE BIOLOGICAL FLUIDS"
(Sheraton Hotel, Brussels, Belgium, 2-5 May, 1983)

Scientific Program

Topic A: Metal binding proteins - (1) Structure; (2) Physiological functions; (3) Physiopathology; (4) Metals and proteins considered.

Topic B: Biomarkers for tumor monitoring - (1) Physiopathology of biomarkers; (2) Screening and monitoring; (3) Tumor localisation; (4) Established biomarkers or under development.

Topic C: Monoclonal antibodies in pathology - (1) Human hybridomas; (2) Cancer; (3) Monoclonal diagnostics.

Roud Table - Monoclonal immunotherapy.

Correspondence and information

Colloquium "Protides of the Biological Fluids", Secretariat Institute for Medical Biology, Alsebergsesteenweg/Chaussée d'Alseberg 196, B-1180 Brussels, Belgium, Tel. (02)344 1950/from 7 March: (02)348 0511, Telex CDHBRU 26501.

NATO ADVANCED STUDY INSTITUTE "REGRESSION OF ATHEROSCLEROTIC LESIONS"
(Hotel ville del Mare, Maratea, Italy, 11-23 September, 1983)

This congress is organized in co-operation with the European Atherosclerosis Group.

Subject: Animal models for atherosclerosis evolution and regression - Implications for the human.

Director: M.R. Malinow (Beaverton, U.S.A.), Co-Director: V. Blaton (Bruges, Belgium).

Inquiries and applications: Dr. V. Blaton, Laboratory of Clinical Chemistry, A.Z. - St.-Jan, Ruddershove 10, B-8000 Bruges, Belgium, Tel. (32) (50) 320 832; Telex: 81379.

GORDON RESEARCH CONFERENCES 'FRONTIERS OF SCIENCE' (New Hampshire, 13 June-26 August, 1983)

The Conferences were established to stimulate research in universities, research foundations, and industrial laboratories.

Individuals interested in attending the Conferences are requested to send their applications as soon as possible to the office of the Director. Attendance at each Conference is limited to approximately 100 conferees.

Advance registration by mail for each Conference is required and is completed on receipt of the registration card and the full fixed fee which is required *in advance of all participants and guests*.

Fixed conference fees: conferee (double occupancy) \$230.00, non-resident conferee (meals, no room) \$190.00, guests (room, meals) \$170.00.

The complete program for the Conferences is published in Science, 4 March, 1983. Reprints are available on request.

Information can be obtained from Dr. Alexander M. Cruickshank, Director, Gordon Research Conferences, University of Rhode Island, Kingston, Rhode Island 02881, Tel (401) 783-4011/3372.

Mail for the office of the Director from 13 June to 26 August, 1983 should be addressed to: Dr. Alexander M. Cruickshank, Director, Gordon Research Conferences, Colby-Sawyer College, New London, NH 03257, Tel (603) 526-2870.

Conference on Membrane Lipid Metabolism at Kimball Union Academy, Meriden, NH, 20-24 June (Christian R.H. Raetz, Chairperson; W. Virgil Brown, Vice Chairperson)

20 June *Physical properties and lipid polymorphisms in model membranes*: Peter Cullis, Modelling of biological membranes; Graham Shipley, Structure and interaction in membrane lipid bilayers; Thomas Thompson, Organization of glycosphingolipids in phosphatidylcholine bilayers. *Reconstitution of functional membrane proteins into model bilayers*: Robert Fillingame, Proton translocating ATPase of *E. coli*; Ronald Kaback, The lac carrier protein - from membrane to molecule; H. Gobind Khorana, Light transducing retinal-based pigments.

21 June. *Molecular biology of membrane lipid synthesis in bacteria and yeast*: William Dowhan, In vitro synthesis and membrane association of lipid biosynthetic enzymes; Eugene Kennedy, Osmotic regulation and the biosynthesis of membrane-derived oligosaccharides; Susan Henry, Genetic regulation of phospholipid synthesis in yeast. *Biogenesis of bacterial membrane lipoproteins and lipopolysaccharides*: Henry Wu, Post-translational modification of pro-lipoprotein in *E. coli*; Shoji Mizushima, Biogenesis of membrane lipoproteins in *E. coli*; Ernst Rietschel, Structure and conformation of lipid A; Kuni Takayama, Structure and metabolism of monosaccharide lipid A precursors; *Discussion*: Christian R.H. Raetz and Kuni Takayama, Mitogenic function of lipid A precursors.

22 June. *Secretion and targeting of membrane proteins in simple organisms*: Peter Model, Localization of filamentous phage protein; Tom Silhavy, Genetic analysis of protein export in *E. coli*; Jonathan Beckwith, Genetics of the secretory apparatus in *E. coli*; Randy Dimond, Secretory mutants in *Dictyostelium discoideum*. Uptake and intracellular translocation of membrane lipids: Sam Kaplan, Phospholipid metabolism and localization in *Phodospseudomonas sphaeroides*; Karel Wirts, Properties and function of phospholipid transfer proteins; Mary Jane Osborn, Mechanism of lipopolysaccharide translocation in salmonella; Richard Pagano, Intracellular translocation and metabolism of fluorescent lipid analogs.

23 June. *Biochemistry and somatic cell genetics of membrane sterols*: Peter Edwards, Studies on the synthesis, degradation and mRNA levels of HMGCoA reductase; Daniel Chin and Joe Goldstein, Molecular cloning of HMG CoA reductase; Robert Simoni, Cholesterol metabolism in compactin-resistant animal cells; Michael Sinensky, Somatic cell genetic analysis of the regulation of mevalonate biosynthesis. *Function of membrane lipids and proteins in cellular development*: Ronald Schnaar, Immobilized glycolipids support carbohydrate-specific cell adhesion; William Lennarz, Glycoprotein synthesis and embryonic development; Lucy Shapiro, Role of membrane biosynthesis in caulobacter cell differentiation.

24 June. *Lipid function*: Konrad Bloch, A novel metabolic role for membrane-associated sterols; Hector DeLuca, Biochemistry of the vitamin D endocrine system; Robert Farese, Phosphatidylinositol metabolism in the action of hormones and neurotransmitters; Phil Majerus, Mechanisms of eicosanoid precursor uptake and release in animal cells.

There will be space for a limited number of invited posters at this conference.

Conference on Atherosclerosis at Kimball Union Academy, Meriden, NH, 27 June-1 July (Robert W. Mahley, Co-Chairperson; Michael A. Gimbrone, Jr., Co-Chairperson)

27 June. *Vascular injury and repair I - Cellular interactions* (Morris J. Karnovsky, session chairperson): Morris J. Karnovsky, Overview; Stephen M. Schwartz, Endothelial integrity; Robert D. Rosenberg, Endothelial cell-heparin-smooth muscle interactions; David P. Hajjar, How the endothelium modifies

metabolism of the injured arterial wall. *Vascular injury and repair II – Matrix interactions* (Helene Sage, session chairperson): Helene Sage, Novel glycoproteins of the endothelium – Characterization and modulation; Joseph A. Madri, Matrix influences on endothelial cell proliferation, migration and differentiation; Mark H. Ginsberg, The role of adhesive and matrix glycoproteins in platelet function; Denisa D. Wagner, Biosynthesis, secretion and subcellular localization of VWF protein in endothelium; Robert J. Levy γ -Carboxyglutamic acid-containing proteins and calcific cardiovascular disease.

28 June. *Cell surface receptors – Structure and function* (Daniel Steinberg, session chairperson): Joseph L. Goldstein, Mutations affecting the biosynthesis and processing of the LDL receptor; Thomas L. Innerarity, Protein determinants of apolipoproteins responsible for mediating lipoprotein receptor interactions; Kurt Drickamer, Structure of receptors for glycoproteins. *Poster session I. Endocytosis – Intracellular pathways and processes* (Richard J. Havel, session chairperson): Ann Hubbard, Pathways of receptor-mediated endocytosis in hepatocytes; Mark Marsh, Endocytosis and semliki forest virus infections; Conrad A. Hornick, Studies on an intermediate compartment of the LDL catabolic pathway of hepatocytes; Louis C. Smith, Digital imaging microscopy – Time lapse endocytosis of fluorescent lipoproteins by living cells.

29 June. *Vascular injury and repair III – Mediators and mechanisms* (Michael A. Gimbrone, Jr., session chairperson): Michael A. Gimbrone, Jr., Overview; Ira M. Goldstein, Polymorphonuclear leukocytes and vascular injury; Russell Ross, Growth factor interactions with vascular cells – Molecular mechanisms and effects; Larry D. Witte, Mevalonate, cell growth and lipoprotein metabolism – Novel relationships.

29 June. *Poster session II – Regulation of cholesterol metabolism and transport* (Robert W. Mahley, session chairperson): Ken Luskey, Molecular cloning of HMG CoA reductase; Christopher J. Fielding, Cholesterol transport in human hyperlipidemia; Richard St. Clair, Regulatory pathways controlling cholesterol efflux in pigeon smooth muscle cells with a defective LDL receptor pathway; Ladislav Dory, Metabolism of peripheral lymph lipoproteins – Implications for reverse cholesterol transport.

30 June. *Genetic regulation of apolipoprotein expression* (Godfrey S. Getz, session chairperson): John M. Taylor, Gene expression of Apo-E biosynthesis; Jan Breslow, Structure, function and mutations of the Apo A-I-C-III gene complex; Jeffrey Gordon, Biosynthesis of apolipoproteins in human and rat intestine; Renee Le Boeuf, Genetic control of high density lipoproteins among inbred mouse strains. Special topic speaker: Geoffrey M. Cooper, Tumor transforming genes.

1 July. *Vascular injury and repair IV – Localizing factors* (Donald L. Fry, session chairperson): Donald L. Fry, Overview; Christopher K. Zarins, Endothelial integrity, plaque localization and hemodynamic factors; C. Forbes Dewey, Unsteady fluid shear and vascular endothelium; Eric F. Grabowski, Prostacyclin production by cultured endothelial exposed to controlled levels of shear stress.

Conference on Chemistry of Carbohydrates at Tilton School, Tilton, NH, 27 June – 1 July
(Walter A. Szarek, Chairperson; Roger W. Jeanloz, Vice Chairperson)

27 June. (D. Horton, discussion leader): S. Hanessian, Strategies in synthetic design; S.M. Hecht, Recent studies on the synthesis of bleomycin-group antibiotics. (R.W. Jeanloz, discussion leader): D.R. Bundle, Synthesis and conformational studies on bacterial O-antigens; C.P.J. Glaudemans, The binding of polysaccharides to monoclonal immunoglobulins.

28 June. (P.A. Sandford, discussion leader): D.A. Brant, Realistic molecular modeling of polysaccharide solution conformation; G.O. Aspinnall, Selective fragmentations of polysaccharides. (D.H. Ball, discussion leader): K. Nakanishi, Microscale structure determination of oligosaccharides; V.N. Reinhold, Fast atom bombardment mass spectrometry of complex carbohydrates.

29 June. (J.N. BeMiller, discussion leader): J.B. Jones, Enzymes in asymmetric synthesis; S. Masamune, Stereochemical control in organic synthesis. (B. Coxon, discussion leader): S.L. Patt, Structure analysis of carbohydrates via two-dimensional ^{13}C -NMR spectroscopy; L.D. Hall, NMR studies of carbohydrates in the solid state.

30 June. (G. Descotes, discussion leader): J.H. van Boom, Studies directed towards the synthesis of cell wall and membrane components; W. Pfeleiderer, Modern strategy of oligonucleotide synthesis. (D.J. Walton, discussion leader): V.M. Monnier, Nonenzymatic glycosylation and browning of proteins in diabetes and aging; G.W. Jourdan, Receptor-mediated assimilation and transport of lysosomal enzymes. 1 July. (L. Anderson, discussion leader): Y. Ishido, Novel aspects in carbohydrate chemistry; regioselect-

tive protection and glycosylation reactions; P. Sinay, The chemical synthesis of heparin oligosaccharide fragments.

Poster sessions, in which all attendees are encouraged to participate, will be held. The maximum space available for individual posters will be 4×8 feet. Materials for presentation of posters will be available at the conference if necessary.