
Contents

Volume 7, Part 2, 1979

THE FOURTEENTH COLWORTH MEDAL LECTURE

	PAGE
Sequencing eukaryotic genes <i>or</i> The anatomy of DNA. <i>By</i> G. G. Brownlee	279

580TH MEETING, NOTTINGHAM

Colloquium: Dynamics of Cell Membranes

Biosynthesis and assembly of the endoplasmic reticulum. <i>By</i> G. Dallner, Å. Elhammer & C. Valtersson	297
Structure and assembly of the Semliki virus membrane. <i>By</i> H. Garoff	301
Turnover of mitochondrial proteins in rat liver. <i>By</i> R. J. Mayer	306
Coupling between membrane hormone receptors and adenylate cyclase in tumour cells. <i>By</i> D. Schulster	310
Glycolipids: a class of membrane receptors. <i>By</i> D. R. Critchley, S. Ansell & S. Dilks	314

Colloquium: Dolichyl Phosphate in Eukaryotic Glycosyl Transfer

Glycosylation of viral glycoproteins by host animal cells. <i>By</i> P. W. Robbins	320
Inhibition of glycosylation of viral glycoproteins. <i>By</i> R. T. Schwarz, M. F. G. Schmidt & R. Datema	322
Protein glycosylation in animal secretory tissues. <i>By</i> D. A. White & B. K. Speake	326
Glycosylation of intra- and extra-cellular yeast glycoproteins. <i>By</i> W. Tanner, P. Babczinski, M. Marriott, A. Hasilik & L. Lehle	329
Glycosylation of yeast and fungal cell wall components. <i>By</i> P. Boer	331
Glycosylation of glycoproteins in green plants and algae. <i>By</i> R. P. Lezica	334

Colloquium: Phospholipid Transport and Turnover in Nervous Tissue

Enzymes involved in the metabolism of lipid bases. <i>By</i> S. Spanner & G. B. Ansell	338
Dynamics of phospholipids in cultured cells of neural origin. <i>By</i> E. Yavin & J. Roberts	341
The role of intracellular phospholipid-transporting proteins in the synthesis and turnover of myelin. <i>By</i> M. J. Brammer	345
Calcium ions and inositol phospholipid metabolism in nervous tissue. <i>By</i> H. D. Griffin, M. Sykes & J. N. Hawthorne	348
Neural phospholipases hydrolysing phosphatidylinositol and their possible role in stimulated turnover of this phospholipid. <i>By</i> R. F. Irvine & R. M. C. Dawson	353

Communications

Polyphosphoinositides in isolated preparations of human erythrocyte membrane glycoporphin. <i>By</i> S. D. Shukla, R. Coleman, J. B. Finean & R. H. Michell	358
---	-----

	PAGE
Immunochemical studies of the localization of human monoamine oxidase on the mitochondrial outer membrane. <i>By</i> S. M. Russell, J. Davey & R. J. Mayer	359
The subcellular distribution of 5'-nucleotidase in isolated fat-cells and liver cells from rat. <i>By</i> K. K. Stanley & J. P. Luzio	361
Effects of cytochalasin B on the pinocytosis and degradation of proteins by macrophages. <i>By</i> R. T. Dean	362
Evidence for facilitated diffusion of sugars in rat liver lysosomes. <i>By</i> K. Docherty, G. V. Brenchley & C. N. Hales	364
Presence of the Thomsen-Friedenreich antigen on the surface of normal human milk fat-globule membrane. <i>By</i> G. H. Farrar, R. Harrison & N. A. Mohanna	365
Hydrogenation of the polyunsaturated lipids of chloroplast membranes and the effects on photosynthetic functions. <i>By</i> C. Restall, D. Chapman & P. J. Quinn	366
The formation of lipid-linked sugars as intermediates in glycoprotein biosynthesis by a membrane preparation of chick embryos. <i>By</i> I. A. Tavares & F. W. Hemming	369
The effects of cholesterol on dolichol phosphate monosaccharide production in rat liver microsomal fractions. <i>By</i> T. Coolbear & F. W. Hemming	370
The effect of cycloheximide on protein glycosylation in lactating rabbit mammary gland. <i>By</i> B. K. Speake & D. A. White	372
The effect of secretion on the glycosyltransferases of the rat parotid gland. <i>By</i> A. Baxter & D. Templeton	373
Preliminary studies on the glycosylation of proteins and dolichyl phosphate in preparations of human placenta. <i>By</i> E. M. Jones & F. W. Hemming	375
<i>Staphylococcus aureus</i> as an insoluble adsorbent in a simple, rapid and sensitive assay for concanavalin A-reactive glycoproteins. <i>By</i> T. Barkas, G. H. Farrar & C. M. J. Watson	376
The effect of Triton X-100 on dolichol phosphate monosaccharide formation in rat liver microsomal fractions. <i>By</i> T. Coolbear & F. W. Hemming	377
Fractionation of chromatin by chromatography on ECTHAM cellulose. <i>By</i> A. J. Smith & M. A. Billett	379
The release of high-mobility-group non-histone proteins from nuclei during digestion with deoxyribonuclease II. <i>By</i> M. A. Billett	381
Translation of messenger ribonucleic acid isolated from <i>Staphylococcus aureus</i> (Wood 46) in a heterologous cell-free system. <i>By</i> T. M. A. Wilson & G. Coleman	382
Murine type-C virus expression in human \times mouse hybrid cells. <i>By</i> S. Brown & J. D. Minna	384
Characterization of subunits from fatty acid synthetase in fungi. <i>By</i> A. Alam & N. M. Packter	386
Fatty acid synthesis and the activities of fatty acid synthesizing enzymes in rat adipose tissue during pregnancy and lactation. <i>By</i> P. A. Sinnett-Smith, R. G. Vernon & R. J. Mayer	388
Isolation of poly(adenosine) containing ribonucleic acid from the tissues of gastropod molluscs and its translation in a heterologous system. <i>By</i> E. J. Wood, K. W. Siggins, R. L. Hall & J. M. Orton	389
Determination and purification of arginine decarboxylase from oat seedlings. <i>By</i> T. A. Smith & W. Y. Ng	391
The existence of two different L-3-hydroxyacyl-coenzyme A dehydrogenases in rat tissues. <i>By</i> M. El-Fakhri & B. Middleton	392
	1979

	PAGE
Isolation of the major water-soluble glycoprotein from pig small-intestine mucus and evidence for relatively simple carbohydrate side chains. <i>By</i> M. Mantle & A. Allen	393
'Mapping' on sodium dodecyl sulphate/polyacrylamide gels of fragments of <i>Lymnaea stagnalis</i> haemocyanin. <i>By</i> W. J. Gullick & E. J. Wood	395
Transglutaminase-catalysed labelling of cytochrome <i>c</i> and cytochrome <i>c</i> oxidase. <i>By</i> S. J. Butler & M. Landon	397
Simulation of oxygen utilization in perfused liver. <i>By</i> J. H. Ottaway	398
Disequilibrium among triose phosphates: The role of aldolase. <i>By</i> J. H. Ottaway	400
The methanogenic fermentation of ω -phenylalkane carboxylase acids. <i>By</i> M. T. Balba & W. C. Evans	403
The microbial degradation of sulphanimide-based herbicide (Asulam). <i>By</i> M. T. Balba, M. R. Khan & W. C. Evans	405
The effects of monocyclic terpenes on hepatic S-3-hydroxy-3-methylglutaryl-coenzyme A reductase <i>in vivo</i> . <i>By</i> A. Middleton, B. Middleton, D. A. White & G. D. Bell	407
Epidermal metabolism in experimentally induced hyperplasia. <i>By</i> J. A. Birkin, D. A. White & C. Prottey	408
Regulation of arginine biosynthesis in <i>Azotobacter vinelandii</i> NQ. <i>By</i> A. Razaq & C. K. Leach	409
The regulation of acetoacetate metabolism in heart. <i>By</i> J. H. Ottaway & C. L. McMinn	411
Presence of an inhibitor of protein synthesis in soluble extracts of rat cardiac muscle. <i>By</i> C. Mackie & J. Mowbray	412
Dopamine (3,4-dihydroxyphenethylamine) receptor binding in subcellular fractions from bovine caudate. <i>By</i> R. M. Withy, R. J. Mayer & P. G. Strange	414
Radioimmunological assay of placental monoamine oxidase. <i>By</i> J. F. Powell, G. K. Brown & I. W. Craig	416
The isolation and characterization of an oligodendroglial cell fraction from adult bovine brain white matter and myelinating rat brain. <i>By</i> A. Carruthers & E. M. Carey	418
Friedreich's ataxia: A lysosomal storage disease? <i>By</i> S. Bose & M. Carroll	419
Effect of phospholipase A on somatotropin synthesis. <i>By</i> A. Betteridge & M. Wallis	420
Association of carbohydrate with the antigenic site of the acetylcholine receptor. <i>By</i> T. Barkas, R. Harrison, G. G. Lunt & C. M. J. Watson	422
Iodination of the nicotinic acetylcholine receptor: Inhibition by bacterial contamination. <i>By</i> T. Barkas, R. Harrison, G. G. Lunt & C. M. J. Watson	423
Purification of brain adenylate cyclase by hydrophobic chromatography. <i>By</i> J. Stockton & A. J. Turner	425
 BIOCHEMICAL REVIEWS	
Steady-state enzyme kinetics in mutual depletion systems. <i>By</i> J. R. Griffiths	429
The plant sulpholipid—a major component of the sulphur cycle. <i>By</i> J. L. Harwood & R. G. Nicholls	440
BOOK REVIEWS	449