Contents

Vol. 4, Part 1, 1976

ECOTIVE A CONTROL OVER ORD	
560TH MEETING, OXFORD	PAGE
Colloquium: Cell Surface Antigens	IAGE
The biological significance, isolation and structure of histocompatibility antigens. By D. Snary, M. J. Crumpton, P. Goodfellow & W. F. Bodmer	1
Differentiation antigens of the lymphocyte cell surface. By A. F. Williams	4
Tumour antigens. By G. Klein	8
Colloquium: The Use of Perfusion and Related Techniques in Studying Nervous- Tissue Function	
Release of physiologically active amino acids from intact brain and spinal-cord preparations. By J. F. Mitchell	10
A superfusion system for long-term studies on cerebral cortex in vivo. By P. R. Dodd & H. F. Bradford	13
Continuous determination of ³ H-labelled 3,4-dihydroxyphenethylamine (dopamine) synthesis and release in the cat caudate nucleus <i>in vivo</i> . By A. Chèramy, J. Glowinski, M. J. Besson & C. Gauchy	
Monoamine metabolism in the isolated perfused rat brain. By H. F. Woods, A. R. Green, M. B. H. Youdim & D. G. Grahame-Smith	22
Measurements of arteriovenous differences in the study of substrate supply to the brain. By D. H. Williamson	26
Colloquium: Immunoglobulin Allotypes: Structure and Regulation of their Ex-	•
pression	
Structural localization of human immunoglobulin allotypes. By M. W. Turner	29
Structural studies on rabbit immunoglobulin allotypes. By L. E. Mole	33
Immunoglobulin allotypes of the mouse. By D. W. Dresser, K. D. Keeler & J. M. Phillips	. 34
Chicken immunoglobulin allotypes. By R. Pink	38
Rat immunoglobulin allotypes: Expression by thymus-independent cells. By S. V. Hunt & E. Duvall	, 38
A possible control by regulatory allelic genes of allotypic expression. By A. D. Strosberg	41
Communications	
Lipid composition of <i>Acer pseudoplatanus</i> (sycamore) cells and some aspects of their ultrastructure during growth in batch suspension culture. <i>By</i> N. S. de Silva & M. W. Fowler	
Threonine as a preferred source of 2-carbon units for lipid synthesis in <i>Trypanosoma brucei</i> . By R. A. Klein & D. J. Linstead	
Biosynthesis of phosphatidylcholine and phosphatidylethanolamine by germinating soya bean. By J. L. Harwood	50

vi CONTENTS

	PAGE
A partial reaction of δ -aminolaevulinate synthetase from <i>Rhodopseudomonas</i> spheroides. By A. Laghai & P. M. Jordan	52
A quantitative comparison of the dissociation of adult mammalian muscle by various enzymes. By R. Yasin, T. R. Skrbic, G. van Beers & E. J. Thompson	53
5'-Nucleotidase in liver plasma membrane and in the serum of normal and jaundiced rats. By F. S. Issa, B. M. Mullock & R. Hinton	55
Cholesterogenesis from tritiated water in rats: Evidence against the existence of diurnal rhythms (1. Temporal effects). By R. Fears & B. Morgan	58
Cholesterogenesis from tritiated water in rats: Evidence against the existence of diurnal rhythms (2. Effect of meal-feeding). By R. Fears & B. Morgan	60
A new approach to metabolite compartmentation in muscle. By P. J. Seeley, S. J. W. Busby, D. G. Gadian, G. K. Radda & R. E. Richards	62
Age-related changes in the respiratory control ratio of rat liver mitochondria after brief exposure to hypo-osmotic media. By M. C. Barrett & A. A. Horton	64
Synthesis of 50 S ribosomes in a mutant of <i>Escherichia coli</i> . By F. Markey, P. F. G. Sims & D. G. Wild	66
Gene expression and its modification. By S. Lewin	68
High-molecular-weight folates of rat liver. By P. A. Barford, J. A. Blair & F. J. Staff	70
Hydrolytic rupture of ascorbate by adenosine $3':5'$ -cyclic monophosphate phosphodiesterase. By S. Lewin	71
Production of the superoxide radical by horseradish peroxidase. By B. Halliwell & S. Ahluwalia	73
Polyamine oxidase from the leaves of cereals. By T. A. Smith, W. L. Haygarth & J. F. Williams	74
Reconstitution in vitro of nitrate reductase from apoprotein of molybdenum-deficient spinach. By G. Rucklidge, B. Notton & E. Hewitt	77
Folding-pathway selection or cross-linking as the cause of thermal stabilization of yeast invertase conformation by its mannan. By J. Woodward & A. Wiseman	
Slow pH-dependent conformational transitions in rabbit skeletal-muscle phosphofructokinase. By H. B. Rodriguez & M. R. Hollaway	83
An investigation of the subunit structure of rabbit skeletal-muscle phospho-fructokinase. By I. A. Simpson & M. R. Hollaway	85
The kinetics of effector-induced association-dissociation reactions of phospho-fructokinase. By P. F. Liddle, D. Ardron, D. J. Jacobs & G. L. Kellett	87
Organization of oligomycin-sensitive adenosine triphosphatase. By M. D. Partis, E. Bertoli, S. Mascarello & D. E. Griffiths	88
The protonmotive force, the phosphate potential and respiratory control: The ρ -zone interpretation. By G. P. R. Archbold, C. L. Farrington, A. M. McKay & F. H. Malpress	16
Concentrations of phenylalanine and tyrosine in plasma and brain of rats treated with phenylalanine loads. By K. N. Antonas & W. F. Coulson	94
Changes in serum tryptophan, tryptophan binding to serum albumin and serum total amino acid concentration after administration of neuroleptic drugs to rats. By D. A. Bender	
Inhibition of unidirectional influx of glucose into the isolated perfused dog brain by cytochalasin B. By L. R. Drewes, D. D. Gilboe, A. L. Betz & R. W. Horton	100

	PAGE
The time-course of the changes in the concentrations of some volatile fatty acids after administration of hypoglycin to rats. By D. Billington, H. Osmundsen & H. S. A. Sherratt	102
Low-density-lipoprotein metabolism in type II hyperlipoproteinaemia. By C. J. Packard, J. Shepherd, J. L. H. C. Third, R. Lorimer, H. G. Morgan & T. D. V. Lawrie	105
The identification of prostaglandin $F_{2\alpha}$ in human aortal media. By A. G. Smith, J. D. Gilbert, W. A. Harland & C. J. W. Brooks	108
t-Butyldimethylsilyl derivatives in the gas chromatography-mass spectrometry of steroids. By S. J. Gaskell & C. J. W. Brooks	111
Stimulation of prostaglandin accumulation in the anterior pituitary by luliberin. By A. Betteridge, L. Bergeron & N. Barden	113
Pituitary involvement in the control of hepatic steroid metabolism in the rat. By P. Skett, JÅ. Gustafsson, Å. Stenberg & A. Larsson	115
The effect of spermidine on the uptake of tryptophan and corticosteroids by the isolated perfused guinea-pig mammary gland. By A. R. Peters & T. B. Mepham	
The urinary excretion and metabolism of dexamethasone in the horse. By M. C. Dumasia, M. W. Horner, E. Houghton, M. S. Moss, J. Chakraborty & V. Marks	119
Effects of phenethylamine derivatives on the release of biogenic amines from synaptosomes. By M. Raiteri, A. Bertollini, R. del Carmine & G. Levi	121
An approach to cell-surface receptors in an amoebo-flagellate protozoon. By D. S. O'Dell, T. M. Preston, C. A. King & P. R. Gardiner	124
A cell-surface antigen common to human tumours: Detection, localization and characterization. By J. P. Dickinson, J. J. Smith & J. E. D. Dyson	125
Isolation and comparison of the proenzyme and activated forms of the human serum complement subcomponents C1r and C1s. By R. B. Sim & R. R. Porter	127
The adjuvant properties of liposomes. By T. D. Heath, D. C. Edwards & B. E. Ryman	129
Tumour regression with liposome-entrapped asparaginase: Some immunological advantages. By E. D. Neerunjun & G. Gregoriadis	133
The separation of rabbit allotypic b4 immunoglobulin from b4-negative immunoglobulin by affinity chromatography on immunoadsorbents prepared from cellulose <i>trans</i> -2,3-carbonate. By J. F. Kennedy, P. A. Keep & D. Catty	135
Possible cross-reactivity of human anti-mitochondrial antibodies with membrane vesicles of <i>Paracoccus denitrificans</i> . By T. J. Sayers & H. Baum	138
Taurine conjugation of arylacetic acids in the ferret. By J. R. Idle, P. Millburn & R. T. Williams	139
The conjugation of arylacetic acids in the pigeon compared with the hen. By J. R. Idle, P. Millburn, R. T. Williams & G. Zini	141
Influence of chemical structure on the pattern of conjugation in vivo and in vitro of some arylacetic acids in the rat. By P. A. F. Dixon, J. Caldwell, C. J. Woods & R. L. Smith	143
Long-range effects of products of carbon tetrachloride-stimulated lipid peroxidation (by title only). By G. Ugazio, M. V. Torrielli, E. Burdino, B. Sawyer & T. F. Slater	145
The metabolism and binding of catecholamines by the hepatic microsomal fraction of the rat. By D. McKillop & G. Powis	145

viii CONTENTS

	PAGE
The effects of noradrenaline and adrenaline on the phospholipase A2-acylation system of preparations of plasma membrane of heart. By S. Vyvoda & C. E. Rowe	147
The effect of local anaesthetics on the thyrotropin receptor-adenylate cyclase system. By N. J. Marshall, A. Florin-Christensen & S. von Borcke	149
Effects of by-passing the jejunum on mucosal secretion in the pig. By R. A. McCance, R. W. Stoddart, C. Artavanis & A. W. Wilkinson	151
Relationship of the acid micro-climate in rat and human intestine to malabsorption. By M. L. Lucas, J. A. Blair, B. T. Cooper & W. T. Cooke	154
Platelet membrane actin: Solubility and binding studies with ¹²⁵ I-labelled actin. By D. G. Taylor, V. M. Williams & N. Crawford	156
Interaction of aurothiomalate with human serum albumin in vitro. By C. J. Danpure	161
The degradation of porcine neurophysin I by alkaline conditions. By D. Edgar & D. B. Hope	163
Solubilization and peptide 'mapping' of a large external glycoprotein fraction labelled by lactoperoxidase-catalysed iodination of cultured fibroblasts. By R. Nairn & R. C. Hughes	165
Multiplicity of liver microsomal cytochrome P-450: Separation, purification and characterization. By A. Y. H. Lu, D. Ryan, J. Kawalek, P. Thomas, S. B. West, M. T. Huang & W. Levin	169
BOOK REVIEWS	173