

## Cellular Aspects

### Contents of Volume 164, No. 2, 1977

#### FULL PAPERS

	PAGE		PAGE
<b>Biosynthesis and Degradation</b>		The effects of starvation and experimental diabetes on phosphoenolpyruvate carboxy-kinase in the guinea pig.	
Role of haem in the synthesis and assembly of cytochrome <i>P</i> -450.		By K. R. F. Elliott & C. I. Pogson	357
By K. S. Bhat, M. K. Sardana & G. Padmanaban	295	Effect of a nutritional shift on the degradation of abnormal proteins in the mouse liver. Decreased degradation during rapid liver growth.	
Turnover of myelin proteins in mouse brain <i>in vivo</i> .		By R. Amils, R. D. Conde & O. A. Scornik	363
By A. Lajtha, J. Toth, K. Fujimoto & H. C. Agrawal	323	Regional differences in ribonuclease content of rat and mouse kidney.	
Inhibition of protein degradation in isolated rat hepatocytes.		By D. K. Liu & P. E. Matrisian	371
By M. F. Hopgood, M. G. Clark & F. J. Ballard	399	Uridine kinase activities and pyrimidine nucleoside phosphorylation in fluoropyrimidine-sensitive and -resistant cell lines of the Novikoff hepatoma.	
<b>Bioenergetics</b>		By N. Greenberg, D. E. Schumm & T. E. Webb	379
The nature of controlled respiration and its relationship to protonmotive force and proton conductance in blowfly flight-muscle mitochondria.		A comparison of the effects of phytohaem-agglutinin and of calcium ionophore A23187 on the metabolism of glycerolipids in small lymphocytes.	
By R. N. Johnson & R. G. Hansford	305	By D. Allan & R. H. Michell	389
<b>Subcellular Structures</b>		Adenosine and the regulation of insulin secretion by isolated rat islets of Langerhans.	
The transport and metabolism of glutamine by kidney-cortex mitochondria from normal and acidotic rats.		By N. A. Ismail, E.-E. S. M. El Denshary & W. Montague	409
By J. T. Brosnan & B. Hall	331	The effects of acetate, metal cations, phenobarbitone, porphyrogens and substrates of glycine acyltransferase on the utilization of haem by rat liver apo-(tryptophan pyrrolase).	
Preparation of plasma-membrane subfractions from isolated rat hepatocytes.		By A. A.-B. Badawy	431
By M. H. Wisher & W. H. Evans	415	Rapid partial purification of placental glucocerebrosidase $\beta$ -glucosidase and its entrapment in liposomes.	
<b>Cellular Interactions and Control Processes</b>		By I. P. Braidman & G. Gregoriadis	439
Iron-transport characteristics of vesicles of brush-border and basolateral plasma membrane from the rat enterocyte.		The stimulus-secretion coupling of glucose-induced insulin release. Insulin release due to glycogenolysis in glucose-deprived islets.	
By E. J. Eastham, J. I. Bell & A. P. Douglas	289	By W. J. Malaisse, A. Sener, M. Koser, M. Ravazzola & F. Malaisse-Lagae	447
The activities of 2-oxoglutarate dehydrogenase and pyruvate dehydrogenase in hearts and mammary glands from ruminants and non-ruminants.			
By G. Read, B. Crabtree & G. H. Smith	349		

	PAGE		PAGE
<b>Development</b>		<b>Metabolism in Whole Organisms</b>	
Development of mitochondrial energy metabolism in rat brain.		Metabolic fates of diethylstilboestrol sulphates in the rat.	
<i>By</i> J. M. Land, R. F. G. Booth, R. Berger & J. B. Clark	339	<i>By</i> P. A. Barford, A. H. Olavesen, C. G. Curtis & G. M. Powell	423

### RAPID PAPERS

	PAGE		PAGE
<b>Subcellular Structures</b>		The effects of antioxidants on the metabolism and mutagenicity of benzo[ <i>a</i> ]pyrene <i>in vitro</i> .	
Some observations on the choice of detergent for solubilization of the human erythrocyte membrane.		<i>By</i> A. D. Rahimtula, P. K. Zachariah & P. J. O'Brien	473
<i>By</i> D. A. W. Grant & S. Hjertén	465	Inhibition of binding of corticotropin-(1-24)-tetracosapeptide (Synacthen) to membrane receptors of adrenal cortex by cortisol.	
Self-digestion of human erythrocyte membranes. Role of adenosine triphosphate and glutathione.		<i>By</i> A. L. Latner, D. B. Cook & K. U. Solanki	477
<i>By</i> A. Brovelli, M. Suhail, G. Pallavicini, F. Sinigaglia & C. Balduini	469	<b>Metabolism in Whole Organisms</b>	
<b>Cellular Interactions and Control Processes</b>		Enhanced plasma persistence of therapeutic enzymes by coupling to soluble dextran.	
Stimulation of calcium accumulation in cardiac sarcolemma by phosphorylase kinase.		<i>By</i> R. F. Sherwood, J. K. Baird, T. Atkinson, C. N. Wiblin, D. A. Rutter & D. C. Ellwood	461
<i>By</i> P. V. Sulakhe & P. J. St. Louis	457		

The following papers appeared in the last issue of the Biochemical Journal

Molecular Aspects  
Contents of Volume 163, No. 2, 1977

FULL PAPERS

	PAGE		PAGE
<b>Proteins</b>		The molecular size and shape of liver glycogen. By R. Geddes, J. D. Harvey & P. R. Wills	201
Preliminary characterization of two thymus-dependent xenoantigens from mouse lymphocytes. By I. S. Trowbridge, M. Nilsen-Hamilton, R. T. Hamilton & M. J. Bevan	211	<b>Enzymology</b>	
The structure and enzymic activities of the C1r and C1s subcomponents of C1, the first component of human serum complement. By R. B. Sim, R. R. Porter, K. B. M. Reid & I. Gigli	219	The interaction of <i>N</i> -acetylhexosaminidase with insolubilized concanavalin A. By M. G. Brattain, P. M. Kimball, T. G. Pretlow, II & M. E. Marks	247
Chemical and physical characterization of a phosphoprotein, protein C, from human saliva and comparison with a related protein A. By A. Bennick	229	Purification of carboxypeptidase B from human pancreas. By D. V. Marinkovic, J. N. Marinkovic, E. G. Erdös & C. J. G. Robinson	253
The binding of calcium to a salivary phosphoprotein, protein C, and comparison with calcium binding to protein A, a related salivary phosphoprotein. By A. Bennick	241	Some properties of aldehyde dehydrogenase from sheep liver mitochondria. By G. J. Hart & F. M. Dickinson	261
The amino acid sequence of cytochrome <i>c</i> from the locust, <i>Schistocerca gregaria</i> Forskal. By A. Lyddiatt & D. Boulter	333	A serological investigation into the acidic $\alpha$ -D-mannosidase in normal Angus cattle and in a calf with mannosidosis. By N. C. Phillips, B. G. Winchester & R. D. Jolly	269
The chemistry of the collagen cross-links. Characterization of the products of reduction of skin, tendon and bone with sodium cyanoborohydride. By S. P. Robins & A. J. Bailey	339	Oxidation-reduction potentials of turkey liver xanthine dehydrogenase and the origins of oxidase and dehydrogenase behaviour in molybdenum-containing hydroxylases. By M. J. Barber, R. C. Bray, R. Cammack & M. P. Coughlan	279
The action of proteolytic enzymes on the glycoprotein from pig gastric mucus. By M. Scawen & A. Allen	363	Calcium ion-dependent myosin from decapod crustacean muscles. By W. Lehman	291
Phosphorylation of synaptic-membrane proteins from ox cerebral cortex <i>in vitro</i> . Preparation of fractions enriched in phosphorylated proteins by using extraction with detergents and urea, and gel filtration. By P. R. Dunkley, H. Holmes & R. Rodnight	369	The allosteric mechanism of bovine liver glutamate dehydrogenase. Evidence from circular-dichroism studies for a conformational change in the ternary complex enzyme-(oxidized nicotinamide-adenine dinucleotide)-glutarate. By S.-S. Chen, P. C. Engel & P. M. Bayley	297
<b>Carbohydrates</b>		Evidence that latent collagenases are enzyme-inhibitor complexes. By A. Sellers, E. Cartwright, G. Murphy & J. J. Reynolds	303
The influence of lysosomes on glycogen metabolism. By R. Geddes & G. C. Stratton	193		

(continued overleaf)

(continued from preceding page)

	PAGE		PAGE
The subunit structure of rabbit skeletal-muscle phosphofructokinase and the amino acid sequence of the tryptic peptide containing the highly reactive thiol group. By I. A. Simpson, M. R. Hollaway & J. Beard	309	[ <sup>19</sup> F]Fluorine nuclear-magnetic-resonance study of the interaction of difluoro-oxaloacetate with aspartate transaminase. By P. A. Briley, R. Eisenthal, R. Harrison & G. D. Smith	325
Enzyme instability and proteolysis during the purification of an alcohol dehydrogenase from <i>Drosophila melanogaster</i> . By D. R. Thatcher	317	Characterization of two triacylglycerol lipase activities in pig post-heparin plasma. By C. Ehnholm, A. Bensadoun & W. V. Brown	347
		Characterization of microsomal choloyl-co-enzyme A synthetase. By D. A. Vessey & D. Zakim	357

### RAPID PAPERS

	PAGE		PAGE
<b>Proteins</b>		<b>Enzymology</b>	
Kinetic properties of the primary inhibitor of plasmin from human plasma. By U. Christensen & I. Clemmensen	389	A simple method for purification of epoxide hydratase from rat liver. By R. G. Knowles & B. Burchell	381
Different reactivities of free and bound amino groups in deoxy- and liganded haemoglobin. By D. Bresciani	393	The role of the imidazolyl nitrogen atoms of histidine-12 in ribonuclease S. By O. D. van Batenburg, I. Voskuyl-Holtkamp, C. Schattenkerk, K. Hoes, K. E. T. Kerling & E. Havinga	385
Protein chromatography on adsorbents with hydrophobic and ionic groups. Purification of human erythrocyte glycoporphin. By R. J. Simmonds & R. J. Yon	397		