

CONTENTS

VOL. 64, No. 1

JANUARY 1983

Guidance for Authors	i-x
<hr/>	
Editorial Review: The role of pituitary gonadotrophin-releasing hormone receptors in the physiological regulation of gonadotrophin secretion. R. N. CLAYTON	1-6
Controversies in Medicine: Luxuskonsumption, diet-induced thermogenesis and brown fat: a critical review. G. R. HERVEY and G. TOBIN	7-18
Controversies in Medicine: Luxuskonsumption, diet-induced thermogenesis and brown fat: the case in favour. N. J. ROTHWELL and M. J. STOCK	19-23
<hr/>	
The pulmonary haemodynamic effects of almitrine infusion in men with chronic hypercapnia. W. L. DULL, J. M. POLU and P. SADOUL	25-31
Myocardial exchanges of glutamate, alanine and citrate in controls and patients with coronary artery disease. A. R. THOMASSEN, T. T. NIELSEN, J. P. BAGGER and P. HENNINGSEN	33-40
Glucose turnover and indices of recycling in thyrotoxicosis and primary thyroid failure. A. J. MCCULLOCH, R. NOSADINI, A. PERNET, M. PINIEWSKA, D. B. COOK, F. CLARK, D. G. JOHNSTON and K. G. M. M. ALBERTI	41-47
Cholinergic manifestations of the acute autonomic reaction to hypoglycaemia in man. R. J. M. CORRALL, B. M. FRIER, N. MCD. DAVIDSON, W. M. HOPKINS and E. B. FRENCH	49-53
Pain and fatigue after concentric and eccentric muscle contractions. D. J. NEWHAM, K. R. MILLS, B. M. QUIGLEY and R. H. T. EDWARDS	55-62
Release of a 6-oxoprostaglandin E ₁ -like substance from human platelets. F. J. LOFTS and P. K. MOORE	63-68
Factors influencing the regional deposition of inhaled particles in man. M. J. CHAMBERLAIN, W. K. C. MORGAN and S. VINITSKI	69-78
Effects of myeloid leukaemic blast cell extract on sodium transport in human erythrocytes. M. A. MIR	79-83
Sex differences of hepatic conjugation of bilirubin determine its maximal biliary excretion in non-anaesthetized male and female rats. M. MURACA, JAN DE GROOTE and J. FEVERY	85-90
The influence of different types of ω 3 polyunsaturated fatty acids on blood lipids and platelet function in healthy volunteers. T. A. B. SANDERS and F. ROSHANAI	91-99
Whole-body protein turnover before and after resection of colorectal tumours. R. E. GLASS, E. B. FERN and P. J. GARLICK	101-108
SHORT COMMUNICATIONS	
Changes in liver glycogen and glycolytic intermediates during abdominal surgery in man. G. M. HALL, CELINE TRAYNOR and J. L. PATERSON	109-111
Relationship between primary biliary cirrhosis and chronic graft versus host disease: investigation of histocompatibility (HLA) antigenic determinants in biliary tract antigens. I. G. MCFARLANE, B. M. MCFARLANE, A. J. HAINES, A. L. W. F. EDDLESTON and R. WILLIAMS	113-116
CORRESPONDENCE SECTION	
Oedema in cor pulmonale. P. D'A. SEMPLE, W. S. WATSON and G. H. BEASTALL	117-118

Editorial Review: Proteolytic enzymes, their inhibitors and lung diseases. R. A. STOCKLEY	119-126
Editorial Review: Hepatic clearance of serum glycoproteins. I. G. MCFARLANE	127-135
<hr/>	
Trypsin-activatable inactive renin in rat plasma. N. GLORIOSO, P. MADEDDU, P. DESSI-FULGHERI, G. FOIS, F. MELONI, F. BANDIERA, G. TONOLO and A. RAPPELLI	137-140
Development of hypertension in renal disease. J. BROD, J. BAHLMANN, M. CACHOVAN and P. PRETSCHNER	141-152
A study on the distribution of body fluids after rapid saline expansion in normal subjects and in patients with renal insufficiency: preferential intravascular deposition in renal failure. H. A. KOOMANS, A. B. GEERS, P. BOER, J. C. ROOS and E. J. DORHOUT MEES	153-160
Cerebral blood flow and cerebral metabolism in normal and intrauterine growth retarded neonatal piglets. P. A. FLECKNELL, R. WOOTTON and MURIEL JOHN	161-165
Erythrocyte sodium and potassium in patients with hypokalaemia. M. CUMBERBATCH and D. B. MORGAN	167-176
Effect of hypokalaemia on the ouabain-sensitive sodium transport and the ouabain-binding capacity in human erythrocytes. E. J. RUBYTHON and D. B. MORGAN	177-182
Effect of aldosterone on the human erythrocyte sodium-potassium pump <i>in vitro</i> . N. STERN, F. BECK and J. SOWERS	183-186
Changes in haem synthesis associated with occupational exposure to organic and inorganic sulphides. R. TENHUNEN, H. SAVOLAINEN and P. JÄPPINEN	187-191
Characterization of pure human pancreatic juice: cobalamin content, cobalamin-binding proteins and activity against human R binders of various secretions. R. CARMEL, S. B. ABRAMSON and I. G. RENNER	193-205
Clearance and non-invasive determination of the hepatic extraction of indocyanine green in baboons and man. S. L. GRAINGER, P. W. N. KEELING, I. M. H. BROWN, J. H. MARIGOLD and R. P. H. THOMPSON	207-212
Nocturnal hypoxaemia in chronic obstructive pulmonary disease. J. R. STRADLING and D. J. LANE	213-222
The interaction of cigarette smoke solution with α_1 -antitrypsin: effect on inhibitory capacity, electrophoretic mobility and immunological measurement. R. A. STOCKLEY and S. C. AFFORD	223-230
SHORT COMMUNICATIONS	
Recovery of infused [^{14}C]bicarbonate as respiratory $^{14}\text{CO}_2$ in man. G. A. CLUGSTON and P. J. GARLICK	231-233
Effect of nicotinic acid on acylglycerol metabolism in human adipose tissue. P. ARNER and J. ÖSTMAN	235-237
Adenosine diphosphate-degrading activity in placenta. M. BARRADAS, M. KHOKHER, R. HUTTON, I. L. CRAFT and P. DANDONA	239-241
CORRESPONDENCE SECTION	
A dissenting view of the significance of 3-methylhistidine excretion in cirrhotic patients. M. J. RENNIE, D. J. MILLWARD, D. HALLIDAY and K. LUNDHOLM	243-246
MEDICAL RESEARCH SOCIETY (Meeting 6 and 7 January 1983)	
Communications	1p-74p

VOL. 64, No. 3

MARCH 1983

Editorial Review: Biochemical mechanisms of hepatic encephalopathy. I. R. CROSSLEY, E. N. WARDLE and R. WILLIAMS	247-252
Editorial Review: Digitalis intoxication. J. K. ARONSON	253-258
<hr/>	
Baroreflex function after therapy withdrawal in patients with essential hypertension. R. CARRETTA, B. FABRIS, G. BELLINI, LAURA TONUTTI, GABRIELLA BATTILANA, ANNA BIANCHETTI and LUCIANO CAMPANACCI	259-263
Platelet α_2 -adrenergic receptors in treated and untreated essential hypertension. H. J. MOTULSKY, D. T. O'CONNOR and P. A. INSEL	265-272
The epidemiology of plasma renin. T. W. MEADE, J. D. IMESON, D. GORDON and W. S. PEART	273-280
The role of cardiopulmonary sympathetic afferents in blood volume homeostasis in the non-human primate. K. G. CORNISH and J. P. GILMORE	281-287
The reliability of the carbon dioxide-rebreathing, indirect Fick method of cardiac output determination in patients with pulmonary disease. R. I. STEWART and C. M. LEWIS	289-293
Effects of dietary sodium on circadian rhythm and physiological responses of 18-hydroxycorticosterone. J. R. SOWERS, V. I. MARTIN and F. W. J. BECK	295-301
The effect of experimental rat tumours on progesterone binding in the host liver. G. FEUER and J. A. KELLEN	303-306
Binding of testosterone and oestradiol to sex hormone binding globulin, human serum albumin and other plasma proteins: evidence for non-specific binding of oestradiol to sex hormone binding globulin. M. J. IQBAL, MAUREEN DALTON and R. S. SAWERS	307-314
Growth hormone-induced changes in myofibrillar protein breakdown in hypopituitary children. F. J. BALLARD, J. L. BURGOYNE, T. M. TOMAS and J. L. PENFOLD	315-320
Alterations in tyrosine and protein kinetics produced by injury and branched chain amino acid administration in rats. A. SAKAMOTO, L. L. MOLDAWER, J. D. PALOMBO, S. P. DESAI, B. R. BISTRAN and G. L. BLACKBURN	321-331
Purine transport and metabolism in man: the effect of exercise on concentrations of purine bases, nucleosides and nucleotides in plasma, urine, leucocytes and erythrocytes. R. A. HARKNESS, R. J. SIMMONDS and S. B. COADE	333-340
Mucosal enzyme activities, with special reference to enzymes implicated in bicarbonate secretion, in the duodenum of rats with cysteamine-induced ulcers. D. STIEL, D. J. MURRAY and T. J. PETERS	341-347
Tissue and bacterial splitting of sulphasalazine. A. K. AZAD KHAN, GLYNIS GUTHRIE, H. H. JOHNSTON, S. C. TRUELOVE and D. H. WILLIAMSON	349-354
SHORT COMMUNICATION	
Elevated arterial cyclic AMP levels during the onset of renal hypertension in rats. R. E. CHATELAIN	355-358

VOL. 64, No. 4

APRIL 1983

The importance of the renin-angiotensin system in the development and maintenance of hypertension in the two-kidney one-clip hypertensive rat. J. J. MORTON and ELISABETH C. H. WALLACE	359-370
Post-adrenalectomy hypotension in rats; absence of baroreflex resetting or effect of naloxone. S. M. GARDINER and T. BENNETT	371-376
The cardiovascular and renal responses to short-term isolation in Brattleboro rats. S. M. GARDINER and T. BENNETT	377-382

- The effect of insulin on the rise in blood pressure and plasma aldosterone after angiotensin II in normal man. H. VIERHAPPER, W. WALDHÄUSL and P. NOWOTNY 383-386
- The presence in normal plasma, serum and platelets of factors that stimulate the production of prostacyclin (PGI₂) by cultured endothelial cells. J. M. SEID, P. B. B. JONES and R. G. G. RUSSELL 387-394
- Effect of aspirin on urinary excretion of 6-ketoprostaglandin F_{1α}. P. B. B. JONES and R. G. G. RUSSELL 395-398
- The influence of a high dietary intake of purine-rich animal protein on urinary urate excretion and supersaturation in renal stone disease. B. FELLSTRÖM, B. G. DANIELSON, B. KARLSTRÖM, H. LITHELL, S. LJUNGHALL and B. VESSBY 399-405
- Interaction of diuretics and non-steroidal anti-inflammatory drugs in man. L. FAVRE, PH. GLASSON, A. RIONDEL and M. B. VALLOTTON 407-415
- A Signal Detection Theory analysis of the effect of chest cage restriction upon the detection of inspiratory resistive loads. P. G. NARBED, D. MARCER, J. B. L. HOWELL and E. SPENCER 417-421
- A micro-method for the study of acid secretory function in isolated human oxyntic glands from gastroscopic biopsies. E. FELLENIUS, B. ELANDER, B. WALLMARK, U. HAGLUND, H. F. HELANDER and L. OLBE 423-431
- Trans-mucosal passage of intact peptides in the guinea-pig small intestine *in vivo*: a re-appraisal. M. L. G. GARDNER, B. S. LINDBLAD, D. BURSTON and D. M. MATTHEWS 433-439
- Changes in the number and activity of sodium pumps in erythrocytes from patients with hyperthyroidism. E. J. RUBYTHON, M. CUMBERBATCH and D. B. MORGAN 441-447

SHORT COMMUNICATIONS

- Effect of pH, viscosity and ionic-strength changes on ciliary beating frequency of human bronchial explants. C. K. LUK and M. J. DULFANO 449-451
- α₁-Antitrypsin and reactive systemic amyloidosis. C. P. J. MAURY, A.-M. TEPPPO, B. FRÖSETH and O. WEGELIUS 453-454

VOL. 64, No. 5

MAY 1983

- The effect of phenylephrine upon arterial pressure, carotid sinus radius and baroreflex sensitivity in the conscious greyhound. R. C. PEVELER, D. H. BERGEL, J. L. ROBINSON and P. SLEIGHT 455-461
- What stimulates the renin-angiotensin system in rats with two-kidney renal hypertension? Y. TAKATA, A. E. DOYLE, M. VERONI and S. G. DUFFY 463-470
- Dose-dependent effects of meclofenamate on peripheral vasculature of conscious rabbits. R. A. BANKS, L. J. BEILIN and J. SOLTYS 471-474
- A comparison of the bronchodilator and vasopressor effects of exercise levels of adrenaline in man. J. B. WARREN and N. DALTON 475-479
- Reversible acid activation of amniotic fluid inactive renin. R. C. FRANKS, F. BODOLA, R. D. RENTHAL and R. H. HAYASHI 481-486
- Role of impaired inspiratory muscle function in limiting the ventilatory response to carbon dioxide in chronic airflow obstruction. H. R. GRIBBIN, I. T. GARDINER, G. J. HEINZ III, G. J. GIBSON and N. B. PRIDE 487-495
- Development of the respiratory compensation to progressive metabolic alkalosis resulting from potassium depletion in conscious rats. P. GIRARD, M. BRUN-PASCAUD and J.-J. POCIDALO 497-504
- An improved method for the determination of potassium in leucocytes. H. SCHLEBUSCH, M. SORGER, S. A. HÖCK and F. KRÜCK 505-510
- Insulin-induced glucose utilization influences triglyceride metabolism. J. BAZELMANS, P. J. NESTEL and C. NOLAN 511-516

Effects of ingested steak and infused leucine on forelimb metabolism in man and the fate of the carbon skeletons and amino groups of branched-chain amino acids. M. ELIA and G. LIVESEY	517-526
A study of zinc metabolism in alcoholic cirrhosis. P. R. MILLS, G. S. FELL, R. G. BESSENT, L. M. NELSON and R. I. RUSSELL	527-535
Vertebral bone loss: an unheeded side effect of therapeutic bed rest. B. KRØLNER and B. TOFT	537-540
Physical exercise as prophylaxis against involutional vertebral bone loss: a controlled trial. B. KRØLNER, B. TOFT, S. PORS NIELSEN and E. TØNDEVOLD	541-546

SHORT COMMUNICATIONS

Aminophylline and fatigue of adductor pollicis in man. C. M. WILES, J. MOXHAM, D. NEWHAM and R. H. T. EDWARDS	547-550
Ferroxidase and ascorbate oxidase activities of caeruloplasmin in synovial fluid from rheumatoid patients. D. R. BLAKE, A. BLANN, P. A. BACON, M. FARR, J. M. C. GUTTERIDGE and B. HALLIWELL	551-553
Intravenous ethanol can provide bronchodilatation in asthma. J. G. AYRES and T. J. H. CLARK	555-557

VOL. 64, No. 6

JUNE 1983

Editorial Review: Molecular variants of the lipoproteins. D. J. GALTON, J. STOCKS and A. REES	559-563
--	---------

Response to repeated frusemide administration on low chloride and low sodium intake in the rat. T. KHAN, A. M. KAUFMAN and F. L. MAC-MOUNE	565-572
Lactic acidosis and the cardiovascular system in the dog. A. I. ARIEFF, E. W. GERTZ, R. PARK, W. LEACH and VIRGINIA C. LAZAROWITZ	573-580
Testing for autonomic neuropathy: heart rate changes after orthostatic manoeuvres and static muscle contractions. W. WIELING, C. BORST, J. F. M. VAN BREDERODE, M. A. VAN DONGEN TORMAN, G. A. VAN MONTFRANS and A. J. DUNNING	581-586
Do elderly patients with an excessive fall in blood pressure on standing have evidence of autonomic failure? B. J. ROBINSON, R. H. JOHNSON, D. G. LAMBIE and KAREN T. PALMER	587-591
Haemodynamic responses to static and dynamic handgrip before and after autonomic blockade. S. F. LEWIS, W. F. TAYLOR, B. C. BASTIAN, R. M. GRAHAM, W. A. PETTINGER and C. G. BLOMQUIST	593-599
Influence of muscle wasting on oral glucose tolerance testing. R. T. MOXLEY, R. C. GRIGGS, G. B. FORBES, D. GOLDBLATT and KATHERINE DONOHUE	601-609
The effects of human milk and low-protein formulae on the rates of total body protein turnover and urinary 3-methylhistidine excretion of preterm infants. P. B. PENCHARZ, L. FARRI and A. PAPAGEORGIU	611-616
Central and peripheral nerve conduction in thyroid dysfunction: the influence of L-thyroxine therapy compared with warming upon the conduction abnormalities of primary hypothyroidism. R. J. ABBOTT, B. P. O'MALLEY, D. B. BARNETT, L. TIMSON and F. D. ROSENTHAL	617-622
Impairment of cyclic AMP response to bovine parathyroid hormone in patients on chronic lithium therapy with diminished renal urine-concentrating ability. D. G. WALLER, J. D. M. ALBANO, J. G. B. MILLAR and A. POLAK	623-627
The use of 4-aminobenzoic acid as a marker to validate the completeness of 24 h urine collections in man. SHEILA BINGHAM and J. H. CUMMINGS	629-635

Platelet function and lipoprotein levels after plasma exchange in patients with familial hypercholesterolaemia. G. BROOK, G. WINTERSTEIN and M. AVIRAM	637-642
Growth characteristics of α -foetoprotein-secreting human hepatocellular carcinoma in athymic (nude) mice. M. F. BASSENDINE, N. A. WRIGHT, H. C. THOMAS and S. SHERLOCK	643-648
Formation of hydroxyl radicals from hydrogen peroxide and iron salts by superoxide- and ascorbate-dependent mechanisms: relevance to the pathology of rheumatoid disease. D. A. ROWLEY and B. HALLIWELL	649-653
A radioimmunoassay for α - and β -gliadins. P. J. CICLITIRA and E. S. LENNOX	655-659
CORRESPONDENCE SECTION	
Assessment of vascular responses to postural change. A. C. DORNHORST	661-662