Volume 84

AUTHOR INDEX

Aikawa, A. 243-246
Alberti, K.G.M.M. 461-467
Alessandri, M. 313-317
Allen, M. 319-324
Al-Mahdi, S. 401-405
Anderson, R. 663-669
Anderson, Y. 645-649
Ardaillou, R. 31-39
Arm, J.P. 501-510
Arnold, J. 655-661
Ashmead, G.G. 401-405
Auletta, F.J. 401-405
Aurell, M. 4145
Azzini, M. 611-617
Bakran, A. 243-246
Barnes, P.J. 391-399
Batt, R.M. 339-348
Bergstrom, J. 441-447
Bijlsma, J.A. 627-632
Bode-Boger, S.M. 517-524
Btiger, R.H. 517-524
Bone, J.M. 231-235
Borg, M. 377-379
Boulet, L.P. 73-78
Boulton-Jones, J.M. 449-454
Braatvedt, G.D. 193-199, 201-207
Brown, D. 377-379
Brown, M.J. 55-60
Bruce, S.A. 95-98
Butcher, G.P. 339-348
Cakaloglu, Y. 675-679
Calder, G. 99-104
Calmus, Y. 185-192
Campbell, I.T. 655-661
Cardoso, J.E. 185-192
Carney, S. 407-412
Casey, A. 565-571
Castillo, M.A. 281-286
Castrignano, R. 51-54
Author Index

Gosling, R.G. 593–597
Gray, T.A. 477–482
Green, A. 113–117
Green, C.J. 655–661
Green, N.K. 61–67
Greenhaff, P.L. 565–571
Griffin, G.E. 169–175
Grimbie, R.F. 105–112
Grime, J.S. 231–235
Gros, C. 31–39
Grossman, E. 549–557
Gurden, M.F. 663–669
Gutzki, F.M. 517–524
Guz, A. 671–673

Habib, N. 185–192
Hall, I.P. 151–157
Halliwell, M. 193–199, 201–207
Hammaker, T. 511–516
Hammedouche, T. 11–19
Harries, U.J. 331–337
Harris, R. 565–571
Hassib, A.T. 387–390
Haynes, W.G. 427–433, 485–500
Haywood, S. 339–348
Heagerty, A.M. 61–67
Hedeman, H. 605–609
Helwig, J.-J. 11–19
Henley, M. 319–324
Hernitz, H. 41–45
Heyligenberg, R. 209–216
Heys, S.D. 651–654
Hopkin, K.D. 593–597
Hosoi, M. 21–29
Houssin, D. 185–192
Hughes, A.D. 287–295
Hultman, E. 565–571
Ikenaga, H. 469–475
Illum, L. 605–609
Imai, Y. 47–50
Ishii, N. 469–475
Itoh, H. 469–475
Iwasaki, T. 271–280
Jackson, M.J. 113–117, 339–348
Jagasia, D.H. 645–649
Jalan, R. 113–117
Jankowski, J. 483
Jensen, B.L. 1–10
Jensen, G. 41–45
Jeyaraj, P.R. 185–192
Johnson, P.M. 243–246
Johnstone, J. 663–669
Jones, P.W. 159–167
Judes, C. 11–19
Kamerling, J.P. 573–579
Kamper, A. 237–242
Kastrup, J. 297–304
Katsuki, M. 21–29
Kawamura, K. 531–535
Kawashima, S. 271–280
Keiser, H.R. 549–557
Kennedy, I. 663–669
Khan, K. 99–104
Kim, S. 21–29
Kisow, D.F. 681–685
Ko, Y. 435–440
Kobayashi, M. 511–516
Koide, H. 349–356
Koomans, H.A. 627–632
Kopin, I.J. 549–557
Kren, V. 129–132
Kristensen, J.K. 297–304
Kroegel, C. 391–399
Kubota, J. 531–535
Kudsk, K.A. 681–685
Kunes, J. 129–132
Kurpad, A. 99–104, 559–563

Lamb, E. 691–626
Lane, R. 671–673
Lawrence, W.D. 217–223
Lecomte, J.M. 31–39
Lee, J.A. 141–144
Lee, M.R. 357–357
Lee, T.H. 501–510
Lee, T.W. 69–72
Leehey, D.J. 525–529
Legendre, C. 185–192
Lehmann, E.D. 593–597
Leslie, D.G. 537–542
Leyssac, P.P. 237–242
Lombard, M. 113–117
Low, J.M. 69–72
Lowe, N.M. 113–117
Ludlam, C.A. 79–86
Lupo, A. 611–617
Macdonald, I.A. 263–270, 655–661
MacGregor, I.R. 79–86
Mackay, T. 319–324
MacNeil, S. 477–482
Maltby, P. 231–235
Maltin, C.A. 651–654
Marinos, G. 675–679
Marsden, J. 675–679
Martin, D.P. 663–669
Massfelder, T. 11–19
Mathias, C.J. 419–425
Maule, S. 419–425
McAdam, K.P.W.J. 169–175
McCance, A.J. 413–417
McCleery, J. 419–425
McIver, B. 79–86
McLaughlin, M.K. 401–405
McLaughlin, P.J. 243–246
Menini, C. 611–617
Michel, C. 31–39
Michelacci, S. 313–317
Mignon, F. 31–39
Miller, N.J. 407–412
Milner, A. 407–412
Moghimi, S.M. 605–609
Moots, R.J. 585–591
Morgan, T. 455–460
Morris, B.W. 477–482
Mountford, R.A. 573–579
Moud, T. 47–50
Murooney, H.M. 105–112
Murakami, K. 21–29
Murakami, O. 47–50
Musso, M.J. 11–19

Nakamura, N. 511–516
Nakamura, T. 349–356
Nettekoven, W. 435–440
Nevison, I.M. 651–654
Newrick, P.G. 193–199
Ng, L.L. 133–139, 633–643
Niccolodi, M. 313–317
Nishimura, K. 271–280
Nishimura, M. 531–535
Nobile, M. 51–54
Nouzaki, M. 47–50

O’Connor, B.M. 537–542
O’Donnell, M. 537–542
Oka, T. 531–535
Oldfield, W.L.G. 159–167
Olivieri, O. 611–617
Olsen, M.H. 237–242
Olsen, N.V. 237–242
Orchard, C.H. 141–144
O’Reilly, D.StJ. 449–454
Papageorgiou, A. 543–548
Parker, J.R. 593–597
SUBJECT INDEX

First and last page numbers of papers to which entries refer are given. Page numbers marked with an asterisk refer to Editorial Reviews.

**O-Acetylation**
- sialic acids, gastric aspirates 573–579

**N-Acetyl-β-D-glucosaminidase**
- urine, diabetes 469–475

**Acidosis**
- calcium sensitizers, myofilaments 141–144

**Acquired immunodeficiency syndrome**
- glucose metabolism 209–216

**Active renin**
- transgenic mouse, sodium depletion 21–29

**Acute glycaemic control**
- retinol-binding protein, insulin-dependent diabetes 461–467

**Acute-phase response**
- malnutrition 169–175

**Adenosine A1-receptors**
- non-esterified fatty acids 663–669

**Adenosine triphosphatase**

**Adipose tissue blood flow**
- blockade 297–304

**Adrenaline**
- splanchnic blood flow, hypoglycaemia 201–207
- β-Adrenoceptor blockade
- splanchnic blood flow, hypoglycaemia 201–207
- β-Adrenoceptor desensitization
- airway smooth muscle, cyclic AMP 151–157

**β-Adrenoceptors**
- metoprolol, noradrenaline 413–417

**Advanced glycation end product**
- pyrraline, diabetic complications 87–93

**Ageing**
- muscle strength, disuse 331–337
- muscle strength, hormone replacement therapy 95–98
- sialic acids, gastric aspirates 573–579

**Airflow resistance**
- hypoxaemia, chronic obstructive pulmonary disease 325–329
- airway smooth muscle
- β-adrenoceptor desensitization, cyclic AMP 151–157
- Alanine aminopeptidase
- urine, diabetes 469–475
- Albumin
- nephrotic syndrome 627–632
- Alcohol
- blood flow, superior mesenteric artery 419–425
- zinc kinetics, liver 113–117
- Alcoholic liver disease
- free radicals, electron paramagnetic resonance spectroscopy 339–348
- Alkaline phosphatase
- urine, diabetes 469–475
- Altitude
- breathlessness, exercise 159–167
- Amiloride
- pH regulation, bicarbonate 133–139
- Amino acids
- protein synthesis, flooding dose technique 177–183
- Amylase
- glomerular charge selectivity 449–454
- Anaemia
- erythropoietin, blood pressure 47–50
- erythropoietin, exercise 441–447
- microspheres, spleen 605–609
- Angiotensin
- pressor sensitivity, cirrhosis 525–529
- renin secretion 1–10*
- vascular smooth muscle cell, insulin 435–440
- Antidiuretic hormone
- distal nephron, somatostatin 455–460
- insulin 281–286
- Antigens
- cytotoxic T lymphocytes, class I major histocompatibility complex 585–591
- Antioxidant
- 2,2'-azinobis-(3-ethylbenzothiazoline-6-sulphonic acid), premature neonates 407–412
Anti-renin antibody
  transgenic mouse 21–29
Aortic compliance
  biochemical correlates 593–597
Aortic distensibility
  biochemical correlates 593–597
Aortic rings
  angiotensin, cirrhosis 525–529
Aortocaval fistula
  haemodynamics, renal function 531–535
Aprotinin
  early and late renal catabolism 231–235
Arteriovenous exchange
  glycerol, muscle 99–104
Aspirin
  endothelium, veins 427–433
  platelet aggregation 517–524
Asthma
  β-adrenoceptor desensitization, cyclic
    AMP 151–157
  eosinophils, platelet-activating factor 391–399
  histamine challenge, collateral ventilation 73–78
  leukotrienes 501–510*
Atherosclerosis
  chronic renal failure, selenium 611–617
Atrial natriuretic peptide
  sodium excretion, chronic renal failure 31–39
Atrophy
  β-adrenoceptor agonists 651–654
Baroreceptor
  renin secretion 1–10*
Bicarbonate
  pH regulation, cardiac myocytes 133–139
Bile
  intestinal absorption, cyclosporin A 675–679
Blood flow
  elderly, food ingestion 263–270
  muscle, xenon 559–563
  superior mesenteric artery, alcohol 419–425
Blood flow velocity
  transcranial Doppler technique, repeatability 599–604
Blood pressure
  alcohol 419–425
  elderly, food ingestion 263–270
  endothelin 485–500*
  endothelin, erythropoietin 47–50
  insulin 281–286
  renal renin activity, renin gene 129–132
Breathlessness
  exercise, altitude 159–167
Ca²⁺-adenosine triphosphatase
  calmodulin, thyroxine 217–223
Calcitonin-gene-related peptide
  cerebrospinal fluid, diabetic neuropathy 305–311
  coronary artery, quantitative autoradiography 55–60
Calcium
  acidosis, cardiotonics 141–144
  parathyroid hormone, renin secretion 11–19
  renin secretion 1–10*
Calcium sensitizers
  acidosis, myofilaments 141–144
Calmodulin
  erythrocyte membranes, thyroxine 217–223
Carbamoyl-phosphate synthetase gene
  DNA sequencing, molecular evolution 119–128
Cardiac hypertrophy
  aortocaval fistula 531–535
Cardiac myocytes
  pH regulation, bicarbonate 133–139
Cardiac output
  elderly, food ingestion 263–270
  thermodilution, aortocaval fistula 531–535
Cardiopulmonary baroreceptors
  forearm vasodilatation, congestive heart failure 271–280
Cardiotonics
  acidosis, myofilaments 141–144
Cardiovascular disease
  endothelin 485–500*
Catecholamines
  hypercapnia 69–72
  natriuresis 549–557
  renovascular hypertension, renin–angiotensin system 41–45
CD8
  peptides, cytotoxic T lymphocytes 585–591
Cell activation
  platelet-activating factor, asthma 391–399
Central nervous factors
  adipose tissue blood flow, nocturnal fluctuations 297–304
Cerebral artery
  blood flow velocity, transcranial Doppler technique 599–604
Cerebrospinal fluid
  converting enzyme, enalapril 313–317
  neuropeptides, diabetes neuropathy 305–311
Charge selectivity
  glomerulus, amylase 449–454
Cholesterol
  fibroblasts, intracellular pH 633–643
Chromium
  diabetes 477–482
Chronic bronchitis
Subject Index

nocturnal hypoxaemia, erythropoietin 319–324
Chronic obstructive pulmonary disease
hypoxaemia, airflow resistance 325–329
nocturnal hypoxaemia, erythropoietin 319–324
Chronic renal failure
selenium, glutathione peroxidase 611–617
sodium excretion, neutral endopeptidase inhibitor 31–39
Circadian rhythm
erythropoietin, chronic obstructive pulmonary disease 319–324
Cirrhosis
portal pressure, isolated perfused rat liver 185–192
pressor sensitivity, angiotensin 525–529
Class I major histocompatibility complex peptides, cytotoxic T lymphocytes 585–591
Clenbuterol
muscle strength 651–654
Coagulation
diabetes, venous occlusion 79–86
Collateral ventilation
histamine challenge, asthma 73–78
Colon
mucin, sulphation 483
Congestive heart failure
forearm vasodilatation, cardiopulmonary baroreceptors 271–280
Constant infusion technique
protein synthesis, mathematical modelling 177–183
Continuous ambulatory peritoneal dialysis
ultrafiltration failure, glycated albumin 619–626
Contractile properties
overloaded muscle, mdx mice 145–150
Converting enzyme
cerebrospinal fluid, enalapril 313–317
Coronary artery
calcitonin-gene-related peptide, quantitative autoradiography 55–60
Corticosteroid therapy
inflammatory bowel disease, lipocortin-I antibodies 381–386
C-reactive protein
malnutrition 169–175
Creatine supplementation
muscle fatigue 565–571
Critical illness
protein kinetics 655–661
Crohn's disease
lipocortin-I antibodies, corticosteroid therapy 381–386
Cyclic AMP
β-adrenoceptor desensitization, asthma 151–157
endothelium, oedema 581–584*
Cyclic GMP
sodium excretion, chronic renal failure 31–39
3′,5′-Cyclic nucleotide phosphodiesterase calmodulin, thyroxine 217–223
Cyclic nucleotides
renin secretion 1–10*
Cyclosporin A
intestinal absorption, pharmacokinetics 675–679
Cytokines
sepsis, metabolism 247–256*
Cytotoxic T lymphocytes
peptides, class I major histocompatibility complex 585–591
Degranulation
platelet-activating factor, asthma 391–399
Desensitization
β-adrenoceptors, cyclic AMP 151–157
Diabetes
cromium 477–482
enzymuria 469–475
haemostasis, venous occlusion 79–86
lipoproteins, twins 537–542
microsatellites, non-obese diabetic mouse 257–262
neuropeptides, cerebrospinal fluid 305–311
retinol-binding protein, acute glycaemic control 461–467
Diabetic complications
Maillard reaction, pyrraline 87–93
Diabetic neuropathy
neuropeptides, cerebrospinal fluid 305–311
Dialysis
glutathione peroxidase, selenium 611–617
Diclofenac sodium
microsomal enzymes, triacylglycerol 387–390
Dietary fat
tumour necrosis factor, metabolic responses 105–112
Dihomo-y-linolenic acid
intravenous infusion, leukotriene B 4 511–516
Dihydroxyphenylalanine
dopamine, natriuresis 549–557
Dipeptidyl aminopeptidase IV
urine, diabetes 469–475
Distal nephron
water permeability, somatostatin 455–460
Disuse
muscle strength, ageing 331–337
DNA sequencing
carbamoyl-phosphate synthetase gene, molecular evolution 119–128
DNA synthesis
vascular smooth muscle cell, insulin 435–440
Dopamine
dihydroxyphenylalanine, natriuresis 549–557
kidney, hypertension 357–375*
renal function, lithium 237–242
Doppler ultrasound
splanchnic blood flow, adrenaline 201–207
splanchnic blood flow, glucagon 193–199
Drug carriers
spleen, anaemia 605–609
Effective renal plasma flow
dopamine, lithium 237–242
Elderly
haemodynamics, food ingestion 263–270
Electrolyte transport
distal nephron, somatostatin 455–460
Electron paramagnetic resonance spectroscopy
free radicals, alcoholic liver disease 339–348
EMD 57033
acidosis, myofilaments 141–144
Emphysema
nocturnal hypoaxaemia, erythropoietin 319–324
Enalapril
converting enzyme, cerebrospinal fluid 313–317
Endothelial factors
renin secretion 1–10*
Endothelin
blood pressure, erythropoietin 47–50
nitric oxide, veins 427–433
physiology and role in disease 485–500*
Endothelium
free radicals, superoxide dismutase 287–295
oedema, cyclic AMP 581–584*
Endotoxin
tumour necrosis factor-α, metabolism 247–256*
Energy expenditure
critical illness 655–661
Energy metabolism
creatine supplementation 565–571
Enteric disease
intestinal stem cells, microvillus 377–379
Enterocyte differentiation
microvillus, enteric disease 377–379
Eosinophils
morphological changes, platelet-activating factor 391–399
Epidermal growth factor
vascular smooth muscle cell, insulin 435–440
Erythrocytes
sodium–potassium pump, menstrual cycle 401–405
Erythropoietin
blood pressure, endothelin 47–50
haemodialysis, exercise 441–447
nocturnal hypoaxaemia, chronic obstructive pulmonary disease 319–324
Fat
sepsis, tumour necrosis factor-α 247–256*
Fatigue
creatine supplementation 565–571
Ferryl myoglobin
2,2’-azinobis-(3-ethylbenzothiazoline-6-sulphonic acid), antioxidant 407–412
Fibrinolysis
diabetes, venous occlusion 79–86
Fibroblasts
intracellular pH, 3-hydroxy-3-methylglutaryl-CoA reductase 633–643
Flooding dose technique
protein synthesis, mathematical modelling 177–183
Focal glomerular sclerosis
tumour necrosis factor 349–356
Food ingestion
haemodynamics, elderly 263–270
Forearm vasodilatation
cardiopulmonary baroreceptors, congestive heart failure 271–280
Fractional synthesis rate of protein
flooding dose technique, mathematical modelling 177–183
Free radicals
alcohol, liver 339–348
premature neonates 407–412
vascular smooth muscle, superoxide dismutase 287–295
Gastric aspirates
sialic acids, ageing 573–579
Gene mapping
non-obese diabetic mouse 257–262
Gene structure
polymerase chain reaction, molecular evolution 119–128
Glomerulus
charge selectivity, amylase 449–454
Glucagon
splanchnic blood flow, hypoglycaemia 193–199
Glucose metabolism
acquired immunodeficiency syndrome 209–216
sepsis, tumour necrosis factor-α 247–256*
γ-Glutamyl transpeptidase
urine, diabetes 469–475
Glutathione peroxidase
<table>
<thead>
<tr>
<th>Subject</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>selenium, chronic renal failure</td>
<td>611–617</td>
</tr>
<tr>
<td>Glycated albumin</td>
<td>continuous ambulatory peritoneal dialysis, ultrafiltration failure</td>
</tr>
<tr>
<td>Glycation</td>
<td>ultrafiltration failure, continuous ambulatory peritoneal dialysis</td>
</tr>
<tr>
<td>Glycerol</td>
<td>arteriovenous exchange, muscle</td>
</tr>
<tr>
<td>GR79236</td>
<td>non-esterified fatty acids</td>
</tr>
<tr>
<td>Haemodialysis</td>
<td>endothelin, blood pressure</td>
</tr>
<tr>
<td></td>
<td>exercise, erythropoietin</td>
</tr>
<tr>
<td>Haemostasis</td>
<td>diabetes, venous occlusion</td>
</tr>
<tr>
<td>Handgrip</td>
<td>ageing, disuse</td>
</tr>
<tr>
<td>Health</td>
<td>muscle strength, ageing</td>
</tr>
<tr>
<td>Histamine challenge</td>
<td>collateral ventilation, asthma</td>
</tr>
<tr>
<td>Hormone replacement therapy</td>
<td>muscle strength, ageing</td>
</tr>
<tr>
<td>3-Hydroxy-3-methylglutaryl-CoA reductase</td>
<td>intracellular pH, fibroblasts</td>
</tr>
<tr>
<td>Hypercalciuria</td>
<td>renal stone disease, vitamin D</td>
</tr>
<tr>
<td>Hypercapnia</td>
<td>catecholamines</td>
</tr>
<tr>
<td>Hyperoxaluria</td>
<td>renal stone disease, vitamin D</td>
</tr>
<tr>
<td>Hypertension</td>
<td>kidney, dopamine</td>
</tr>
<tr>
<td>Hypocapnia</td>
<td>catecholamines</td>
</tr>
<tr>
<td>Hypoglycaemia</td>
<td>haemostasis</td>
</tr>
<tr>
<td></td>
<td>splanchnic blood flow, adrenaline</td>
</tr>
<tr>
<td></td>
<td>splanchnic blood flow, glucagon</td>
</tr>
<tr>
<td>Hypoxaemia</td>
<td>airflow resistance, chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td></td>
<td>erythropoietin, chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>Inactive renin</td>
<td>transgenic mouse</td>
</tr>
<tr>
<td>Indocyanine Green</td>
<td>hepatic extraction ratio, model</td>
</tr>
<tr>
<td>Indomethacin</td>
<td>pressor sensitivity, cirrhosis</td>
</tr>
<tr>
<td>Infant formulae</td>
<td>whey protein, non-protein nitrogen</td>
</tr>
<tr>
<td>Insulation</td>
<td>blood pressure, antidiuretic hormone</td>
</tr>
<tr>
<td></td>
<td>DNA synthesis, vascular smooth muscle cell</td>
</tr>
<tr>
<td></td>
<td>haemostasis</td>
</tr>
<tr>
<td></td>
<td>lipoproteins, twins</td>
</tr>
<tr>
<td>Insulin sensitivity</td>
<td>acquired immunodeficiency syndrome</td>
</tr>
<tr>
<td></td>
<td>insulin-dependent diabetes</td>
</tr>
<tr>
<td>Isoproterenol</td>
<td>renin secretion</td>
</tr>
<tr>
<td>Isotope-wash-out technique</td>
<td>adipose tissue blood flow, nocturnal fluctuations</td>
</tr>
<tr>
<td>Juxtaglomerular cells</td>
<td>control of renin secretion</td>
</tr>
<tr>
<td>Kidney</td>
<td>hypertension, dopamine</td>
</tr>
<tr>
<td>Laser Doppler flowmetry</td>
<td>renal blood flow, aortocaval fistula</td>
</tr>
<tr>
<td>Leucine</td>
<td>protein kinetics, critical illness</td>
</tr>
<tr>
<td></td>
<td>protein synthesis, flooding dose technique</td>
</tr>
<tr>
<td>Leukotriene B4</td>
<td>dihomo-γ-linolenic acid, intravenous infusion</td>
</tr>
<tr>
<td>Leukotrienes</td>
<td></td>
</tr>
</tbody>
</table>
asthma 501–510*

Lipids
  aortic distensibility 593–597
twins, diabetes 537–542

Lipocortin-I antibodies
  inflammatory bowel disease, corticosteroid therapy 381–386

Lipoproteins
twins, diabetes 537–542

Lithium
  renal function, dopamine 237–242

Liver
  alcohol, free radicals 339–348
  zinc kinetics, alcohol 113–117

Local nervous blockade
  adipose tissue blood flow, nocturnal fluctuations 297–304

Low-birthweight infants
  non-protein nitrogen, whey protein 543–548

Low-density lipoprotein-cholesterol
  aortic distensibility 593–597

Low-molecular-mass proteins
  early and late renal catabolism 231–235

Low-molecular-mass proteinuria
  insulin-dependent diabetes, acute glycaemic control 461–467

Lower leg
  adipose tissue blood flow, nocturnal fluctuations 297–304

Lower-body negative pressure
  forearm vasodilatation, congestive heart failure 271–280

Macula densa
  renin secretion 1–10*

Maillard reaction
  pyrraline, diabetic complications 87–93

Malnutrition
  acute-phase response 169–175
  mdx mice
    overloaded muscle, contractile properties 145–150

Meniscectomy
  β-adrenoceptor agonists 651–654

Menopause
  muscle strength, hormone replacement therapy 95–98

Menstrual cycle
erthrocytes, sodium–potassium pump 401–405

Metabolic responses
  sepsis, tumour necrosis factor-α 247–256*
tumour necrosis factor, dietary fat 105–112

Metoprolol
  β-adrenoceptors, noradrenaline 413–417

Microcirculation
  nocturnal fluctuations, local nervous blockade 297–304
  permeability, oedema 581–584*

Microsatellites
  non-obese diabetic mouse 257–262

Microsomal enzymes
  phenylbutazone, triacylglycerol 387–390

Microspheres
  spleen, anaemia 605–609

Microvillus
  intestinal stem cells, enteric disease 377–379

Mitochondria
  liver, alcohol 339–348

Molecular evolution
  introns, carbamoyl-phosphate synthetase gene 119–128

$N^G$-Monomethyl-L-arginine
  endothelium, veins 427–433

Mucin
  sulphation, colon 483

Multiple organ failure
  protein kinetics 655–661

Muscle
  blood flow, xenon 559–563
  fatigue, creatine supplementation 565–571
  glycerol, arteriovenous exchange 99
  arteriovenous exchange 627–632

Muscle strength
  β-adrenoceptor agonists 651–654
  ageing, disuse 331–337
  ageing, hormone replacement therapy 95–98

Myofilaments
  acidosis, calcium sensitizers 141–144

Natriuresis
  dihydroxyphenylalanine, dopamine 549–557
  dopamine, lithium 237–242

Nephrotic syndrome
  volume expansion 627–632

Nerve biopsy
  neuropeptides, diabetic neuropathy 305–311

Neutral endopeptidase
  cerebrospinal fluid, enalapril 313–317

Neutral endopeptidase inhibitor
  sodium excretion, chronic renal failure 31–39

Nitric oxide
  endothelium, veins 427–433
  superoxide dismutase, vascular smooth muscle 287–295
  vasodilatation, oedema 581–584*

Nitrogen
  whey protein, infant formulae 543–548

Non-esterified fatty acids
  adenosine A₁-receptors 663–669

Non-insulin-dependent diabetes
  enzymuria 469–475
Non-insulin-mediated glucose uptake
acquired immunodeficiency syndrome 209–216
Non-obese diabetic mouse
microsatellites 257–262
Non-protein nitrogen
whey protein, infant formulae 543–548
Noradrenaline
β-adrenoceptors, metoprolol 413–417
cardiopulmonary baroreceptors, congestive heart failure 271–280
Noradrenaline kinetics
prehypertension 225–230
Octreotide
splanchnic blood flow, hypoglycaemia 193–199
Oedema
endothelium, cyclic AMP 581–584*
Osmotic forces
renin secretion 1–10*
Overloaded muscle
progressive deterioration, mdx mice 145–150
31P nuclear magnetic resonance spectroscopy
intracellular pH, tri-iodothyronine 645–649
Pain
neuropeptides, cerebrospinal fluid 305–311
Painful neuropathy
neuropeptides, cerebrospinal fluid 305–311
Parathyroid hormone
calcium, renin secretion 11–19
Peptides
cytotoxic T lymphocytes, class I major histocompatibility complex 585–591
Permeability
endothelium, oedema 581–584*
Peroxisome
liver, alcohol 339–348
pH regulation
bicarbonate, cardiac myocytes 133–139
Phenylbutazone
microsomal enzymes, triacylglycerol 387–390
Phosphocreatine
muscle fatigue, creatine supplementation 565–571
Platelet aggregation
aspirin infusion 517–524
Platelet-activating factor
eosinophils, asthma 391–399
Platelets
 glutathione peroxidase, selenium 611–617
Plethysmography
blood flow, limb 559–563
Polycythaemia
erythropoietin, chronic obstructive pulmonary disease 319–324
Polymerase chain reaction
gene structure, molecular evolution 119–128
Portal hypertension
isolated perfused rat liver, cirrhosis 185–192
Portal pressure
isolated perfused rat liver, cirrhosis 185–192
Posture
retinol-binding protein, insulin-dependent diabetes 461–467
Potassium
erthrocytes, menstrual cycle 401–405
Pregnancy
erthrocytes, sodium–potassium pump 401–405
Prehypertension
noradrenaline kinetics 225–230
Premature neonates
antioxidant, 2,2'-azinobis-(3-ethylbenzothiazoline-6-sulphonic acid) 407–412
Pressor sensitivity
angiotensin, cirrhosis 525–529
Progressive deterioration
overloaded muscle, mdx mice 145–150
Prostacyclin
endothelium, veins 427–433
Prostaglandins
pressor sensitivity, cirrhosis 525–529
renin secretion 1–10*
Protein kinetics
critical illness 655–661
Protein synthesis
flooding dose technique, mathematical modelling 177–183
Proteinuria
glomerular charge selectivity, amylase 449–454
Proto-oncogenes
thyroid hormones, ventricular hypertrophy 61–67
Proton efflux
skeletal muscle, tri-iodothyronine 645–649
Pulmonary resistance
continuous measurement and display 671–673
Puromycin aminonucleoside nephrosis
tumour necrosis factor 349–356
Pyrraline
Maillard reaction, diabetic complications 87–93
Quantitative autoradiography
calcitonin-gene-related peptide, coronary artery 55–60
Recombinant inbred strains
renin gene, renal renin activity 129–132
Rehabilitation
β-adrenoceptor agonists 651–654
Renal catabolism
    low-molecular-mass proteins 231–235
Renal disease
    endotheil 485–500*
Renal function
    dopamine, lithium 237–242
    laser Doppler flomometry, aortocaval fistula 531–535
Renal nerves
    renin secretion 1–10*
Renal renin activity
    renin gene, blood pressure 129–132
Renal stone disease
    hyperoxaluria, vitamin D 51–54
Renal transplantation
    uromodulin, tumour necrosis factor 243–246
Renin
    transgenic mouse, sodium depletion 21–29
    renin gene 21–29
Renin secretion
    control mechanisms 1–10*
Renin–angiotensin system
    catecholamines, renovascular hypertension 41–45
Renovascular hypertension
    catecholamines, renin–angiotensin system 41–45
Repeatability
    transcranial Doppler technique, blood flow velocity 599–604
Respiratory disease
    endothelin 485–500*
Retinol-binding protein
    insulin-dependent diabetes, acute glycaemic control 461–467
Selenium
    glutathione peroxidase, chronic renal failure 611–617
Sepsis
    stress hormones, tumour necrosis factor-α 247–256*
Serum amyloid A
    malnutrition 169–175
Sialic acids
    gastric aspirates, ageing 573–579
Simvastatin
    intracellular pH, fibroblasts 633–643
Skeletal muscle
    proton efflux, tri-iodothyronine 645–649
Skin
    blood flow, xenon 559–563
Sodium
    erythrocytes, menstrual cycle 401–405
kidney, dopamine 357–375*
Sodium depletion
    renin, transgenic mouse 21–29
Sodium excretion
    chronic renal failure, neutral endopeptidase inhibitor 31–39
Sodium–proton antiport
    fibroblasts, 3-hydroxy-3-methylglutaryl-CoA reductase 633–643
    pH regulation, bicarbonate 133–139
    skeletal muscle, tri-iodothyronine 645–649
Somatostatin
    water permeability, distal nephron 455–460
Specific binding
    calcitonin-gene-related peptide, coronary artery 55–60
Splanchnic blood flow
    adrenaline, hypoglycaemia 201–207
    hypoglycaemia, glucagon 193–199
Spleen
    microspheres, anaemia 605–609
Spontaneously hypertensive rats
    renin gene, renal renin activity 129–132
Stable isotopes
    non-protein nitrogen, infant formulae 543–548
    zinc kinetics, alcohol 113–117
Stress hormones
    sepsis, tumour necrosis factor-α 247–256*
Subcellular fractionation
    liver, alcohol 339–348
Subcutaneous blood flow
    nocturnal fluctuations, local nervous blockade 297–304
Substance P
    cerebrospinal fluid, diabetic neuropathy 305–311
Sulphation
    mucin, colon 483
Superior mesenteric artery
    blood flow, alcohol 419–425
Superoxide dismutase
    free radicals, vascular smooth muscle 287–295
Sympathetic nervous system
    natriuresis 549–557
    prehypertension 225–230
Tamm–Horsfall glycoprotein
    tumour necrosis factor, renal transplantation 243–246
Thermodilution
    cardiac output, aortocaval fistula 531–535
Thermoregulation
    adipose tissue blood flow, nocturnal fluctuations 297–304
Thromboxane B₂ synthesis
aspirin infusion 517–524
Thyroid hormones
proto-oncogenes, ventricular hypertrophy 61–67
Thyroxine
calmodulin, erythrocyte membranes 217–223
Trace metals
diabetes 477–482
Transcranial Doppler technique
blood flow velocity, repeatability 599–604
Transgenic mouse
renin, sodium depletion 21–29
Tri-iodothyronine
intracellular pH, $^{31}$P nuclear magnetic resonance spectroscopy 645–649
Triacylglycerol
adenosine A$_1$-receptors 663–669
microsomal enzymes, phenylbutazone 387–390
Trolox
antioxidant, premature neonates 407–412
Tumour necrosis factor
focal glomerular sclerosis 349–356
metabolic responses, dietary fat 105–112
stress hormones, sepsis 247–256*
uromodulin, renal transplantation 243–246
Twins
lipoproteins, diabetes 537–542
Ulcerative colitis
lipocortin-I antibodies, corticosteroid therapy 381–386
mucin, sulphation 483
Ultrafiltration failure
continuous ambulatory peritoneal dialysis, glycated albumin 619–626
Uraemia
haemodialysis, erythropoietin 441–447
Urea
non-protein nitrogen, infant formulae 543–548
Urinary 2,3-dinor-6-keto-prostaglandin F$_1$;$\alpha$
aspirin infusion 517–524
Urinary 2,3-dinor-thromboxane B$_2$
aspirin infusion 517–524
Urinary prostaglandin E$_2$
aspirin infusion 517–524
Urine
enzymes, diabetes 469–475
Urine concentration
distal nephron, somatostatin 455–460
Uromodulin
tumour necrosis factor, renal transplantation 243–246
Vascular smooth muscle
dNA synthesis, insulin 435–440
free radicals, superoxide dismutase 287–295
Vasodilatation
oedema, nitric oxide 581–584*
Veins
endothelium, nitric oxide 427–433
Venous occlusion
haemostasis, diabetes 79–86
Ventricular hypertrophy
proto-oncogenes, thyroid hormones 61–67
Verapamil
renin secretion 11–19
Vitamin D
hyperoxaluria, renal stone disease 51–54
Volume expansion
nephrotic syndrome 627–632
Water permeability
distal nephron, somatostatin 455–460
Whey protein
non-protein nitrogen, infant formulae 543–548
Xenon
blood flow, muscle 559–563
$^{133}$Xe-wash-out technique
adipose tissue blood flow, nocturnal fluctuations 297–304
Zinc kinetics
stable isotope, alcohol 113–117