

PUBLISHED BY PORTLAND PRESS ON BEHALF OF  
THE MEDICAL RESEARCH SOCIETY AND THE BIOCHEMICAL SOCIETY

© The Medical Research Society and the Biochemical Society 1995  
ISSN 0143-5221

*Printed in Great Britain by Bell and Bain Limited, Glasgow*

## Volume 88

### AUTHOR INDEX

- Abdel-Halim, S.M. 301–306  
Abe, Y. 581–585  
Adams, L. 453–461  
Aderka, D. 365–369  
Akaoka, I. 203–210  
Albert, A. 149–157  
Alexander, G.J.M. 263–268  
Alexander, S.L. 4–7  
Anderson, S.E. 235–242  
Andersson, K. 479–484  
Appleyard, C.B. 713–717  
Arrhenius-Nyberg, V. 285–292
- Bäcker, A. 39–45  
Baker, F.E. 405–412  
Balbi, A. 331–336  
Ballmer, P.E. 235–242  
Barlet-Bas, C. 293–299  
Barnes, P.J. 135–139  
Beasley, R. 14–17  
Beattie, A.D. 727–732  
Bee, D. 325–330  
Belcher, P.R. 269–275  
Benard, D.C. 173–178  
Benbow, S.J. 191–196  
Benchetrit, G. 453–461  
Berenson, C.S. 491–499  
Beretz, A. 149–157  
Berglund, H. 165–172  
Bernardi, L. 103–109, 733  
Bernheim, J. 623–627  
Beshyah, S.A. 67–71  
Besler, H.T. 59–66  
Bevegård, S. 439–446  
Bevilacqua, M. 331–336  
Bevington, A. 405–412  
Bhatnagar, D. 311–318  
Bianchini, B. 103–109, 733  
Biamond, B.J. 587–594  
Biggs, T. 179–184  
Bing, R.F. 307–310  
Blendis, L. 525–531  
Blumsohn, A. 243–244  
Bodmer, C.W. 421–426  
Boer, P. 351–358  
Boer, W.H. 351–358  
Bomzon, A. 525–531
- Boomsma, F. 675–679  
Borch-Johnsen, K. 629–633  
Borzi, R.M. 371  
Bossart, H. 607–610  
Boulton, R.A. 119–130  
Bradley, T.D. 173–178  
Broom, J. 235–242  
Brough, D. 405–412  
Brouwer, A. 211–217  
Brown, M.J. 571–580  
Brunner, H.G. 533–542  
Brunner, H.R. 607–610  
Bryson, P. 595  
Büller, H.R. 587–594  
Bülow, J. 543–550  
Burgess, C. 14–17  
Burnier, M. 607–610  
Burrell, L.M. 671–674
- Cargill, R.I. 81–86  
Carlens, P. 439–446  
Carney, S.L. 197–201  
Cerutti, C. 651–655  
Chambers, S.T. 25–27  
Chang, C.-J. 701–706  
Cheng, P.-E. 701–706  
Cheval, L. 293–299  
Chinery, R. 401–403  
Chou, L. 657–663  
Chow, N.-H. 701–706  
Chowienczyk, P.J. 111–117  
Clarkson, P.B.M. 159–164  
Cockcroft, J.R. 111–117  
Cohen, E. 453–461  
Connell, J.M.C. 563–570  
Connor, J.M. 665–670  
Constant, I. 95–102  
Cooper, G.J.S. 7–12  
Cortova, Z. 285–292  
Coutie, W. 159–164  
Crane, J. 14–17  
Crofton, R.J. 727–732  
Crotty, B. 51–57  
Cuisinaud, G. 651–655  
Cummings, M.H. 225–233  
Cundy, T.F. 12–14  
Curry, G. 727–732
- D’Inca, R. 727–732  
Dallegrì, F. 331–336  
Dapino, P. 331–336  
Davies, D.L. 665–670  
De Bono, D.P. 635–641  
De Hoyos, A. 173–178  
De Leeuw, P.W. 421–426  
De Quay, N. 607–610  
De Roos, R. 351–358  
Delacrétaz, E. 607–610  
Deng, L.-Y. 611–622  
Derx, F.H.M. 675–679  
Diaz, M. 345–350  
Donald, R.A. 4–7  
Dotan, I. 365–369  
Doucet, A. 293–299  
Drossos, G.E. 269–275  
Ducher, M. 651–655  
Durrington, P.N. 311–318  
Dyerberg, J. 375–392
- Eastell, R. 243–244  
Eberhard, M. 557–562  
Ebihara, I. 29–37  
Edlund, A. 165–172  
Eisenhofer, G. 533–542  
El-Sayed, H. 463–470  
Elghozi, J.-L. 87–93, 95–102  
Elia, M. 319–324  
Ellis, M.J. 4–7  
Emery, C.J. 325–330  
Erne, P. 557–562  
Ertl, R.F. 337–344  
Espiner, E.A. 4–7, 18–21  
Evans, M.J. 4–7
- Fabbri, M. 371  
Facchini, A. 371  
Fasano, L. 371  
Fauvel, J.P. 651–655  
Favre, H. 293–299  
Feldt-Rasmussen, B. 629–633  
Fell, G.S. 727–732  
Férraille, E. 293–299  
Fisher, J.T. 345–350  
Fotherby, M.D. 185–190  
Foy, C.J.W. 665–670

- Fransen, R. 351–358  
 Fraser, R. 563–570, 655–670  
 Friberg, P. 533–542  
 Friedland, J.S. 393–400  
 Friedmann, P.S. 191–196  
 Fukui, M. 29–37
- Gaffney, D. 727–732  
 Gallacher, B. 141–147  
 Game, F.L. 311–318  
 Garlick, P.J. 235–242  
 Gibbons, L. 211–217  
 Gillies, A.H.B. 197–201  
 Girard, A. 95–102  
 Goldberg, G.R. 319–324  
 Goldstein, D.S. 533–542  
 Goode, H.F. 131–133  
 Goto, A. 413–419  
 Gourdie, R.G. 257–262  
 Graves, J.E. 519–524  
 Green, J. 623–627  
 Grigolo, B. 371  
 Grimble, R.F. 59–66, 485–489  
 Guenifi, A. 301–306  
 Guerin, A.P. 87–93  
 Gundlach, A.L. 671–674  
 Gunn, I. 727–732  
 Gustin, M.P. 651–655  
 Guz, A. 453–461
- Hack, C.E. 587–594  
 Hainsworth, R. 463–470  
 Haller, R.G. 687–693  
 Hamada, M. 551–556  
 Hanson, P. 643–649  
 Harcombe, A.A. 263–268  
 Harrap, S.B. 665–670  
 Hatori, M. 581–585  
 Hattersley, J. 405–412  
 Hayakawa, H. 413–419  
 Haynes, W.G. 509–517  
 Hendriks, H.J.F. 211–217  
 Hennessy, T.R. 225–233  
 Henriksson, K.-G. 687–693  
 Hillier, K. 713–717  
 Hirata, Y. 413–419  
 Hiwada, K. 551–556  
 Hjelm, M. 135–139  
 Hjemdahl, P. 439–446  
 Hodgson, H.J.F. 119–130  
 Hølmer, G. 375–392  
 Horan, M.A. 211–217  
 Houston, R.F. 359–364  
 Howard, P. 325–330  
 Howdle, P.D. 131–133
- Huang, C.-M. 701–706  
 Hultman, E. 479–484  
 Hunter, K.A. 235–242  
 Hutchins, A.-M. 671–674
- Inglis, G.C. 563–570
- James, M.A. 185–190  
 Jamieson, A. 563–570  
 Janssen, M. 421–426  
 Jebb, S.A. 319–324  
 Jennings, G. 319–324  
 Jensen, G. 629–633  
 Jensen, J.S. 629–633  
 Jewell, D.P. 51–57  
 Jia, H. 571–580  
 Johnston, C.I. 671–674  
 Johnston, D.G. 67–71  
 Joles, J.A. 719–725  
 Jorfeldt, L. 687–693
- Kangawa, K. 413–419  
 Karlsson, E. 285–292  
 Keller, U. 681–686  
 Kenna, J.G. 263–268  
 Kennedy, D.G. 73–79, 471–477  
 Kennedy, S. 73–79, 471–477  
 Kharitonov, S.A. 135–139  
 Kilby, M.D. 311–318  
 Kimura, K. 413–419  
 Kindwall, E.P. 595–596  
 Koide, H. 29–37  
 Kokubun, S. 581–585  
 Koomans, H.A. 351–358, 719–725  
 Koskinas, J. 263–268  
 Koyama, S. 337–344  
 Kramer, H.J. 39–45  
 Kumpatula, P. 311–318
- La Rovere, M.T. 103–109, 733  
 Laager, R. 681–686  
 Lahtela, J.T. 427–432  
 Lance, P. 491–499  
 Langley-Evans, S.C. 485–489  
 Larsson, K. 439–446  
 Laude, D. 95–102  
 Laude, E.A. 325–330  
 Laille, M. 651–655  
 Le Bidois, J. 95–102  
 Leikauf, G. 337–344  
 Lenders, J.W.M. 533–542  
 Leuzzi, S. 103–109, 733  
 Lever, A.F. 665–670
- Levi, M. 587–594  
 Levo, Y. 365–369  
 Lewis, S.F. 687–693  
 Li, J.-S. 611–622  
 Lin, J.S.-N. 701–706  
 Lindley, K.J. 219–224  
 Lipworth, B.J. 81–86  
 Liu, P.P. 173–178  
 Livesey, J.H. 4–7  
 Lodwick, D. 665–670  
 Logan, A. 525–531  
 London, G.M. 87–93  
 Lubec, B. 135–139  
 Lubec, G. 135–139  
 Lyon, T.D.B. 727–732
- MacDonald, T.M. 159–164  
 MacFarlane, I.A. 191–196  
 MacGregor, D. 671–674  
 Macleod, C. 159–164  
 Maestri, R. 103–109, 733  
 Mahy, I.R. 501–508  
 Malmlöf, K. 285–292  
 Mamet, R. 365–369  
 Man int't Veld, A.J. 675–679  
 Marc, I. 707–712  
 Marsy, S. 293–299  
 Martin, I.K. 301–306  
 Martin, V. 149–157  
 Marumoto, K. 551–556  
 Masood, A.R. 447–452  
 Matsuo, H. 413–419  
 Mauric, A. 635–641  
 McGaw, B.A. 727–732  
 McInnes, G.T. 433–437  
 McKeever, M. 73–79, 471–477  
 McNurlan, M.A. 235–242  
 Meliconi, R. 371  
 Menys, V.C. 269–275  
 Milla, P.J. 219–224  
 Millar, E.A. 433–437  
 Millward, D.J. 597–606  
 Minoda, S. 203–210  
 Miqdadi, J.A. 491–499  
 Miyashita, H. 203–210  
 Molloy, A. 73–79, 471–477  
 Monteith, S. 571–580  
 Morrell, N.W. 179–184  
 Mortara, A. 103–109, 733  
 Mortola, J.P. 345–350  
 Muller, D.P.R. 219–224  
 Murphy, D.L. 533–542  
 Murphy, K. 453–461  
 Mustonen, J. 427–432  
 Muzulu, S.I. 307–310

- Najem, R. 651-655  
 Nakamura, T. 29-37  
 Naoumova, R. 225-233  
 Neary, R.H. 311-318  
 Ng, L.L. 695-700  
 Nicholls, M.G. 18-21  
 Nijran, K.S. 179-184  
 Ninnis, R. 681-686  
 Noble, M.I.M. 269-275  
 Noblett, K. 191-196  
 Nolte, L.A. 301-306  
 Norman, R.I. 307-310  
  
 O'Brien, P.M.S. 311-318  
 Ogata, N. 203-210  
 Oh, V.M.S. 695-700  
 Omata, M. 413-419  
 Osada, S. 29-37  
 Östenson, C.-G. 301-306  
 Ottonello, L. 331-336  
 Ovesen, L. 375-392  
  
 Pacak, K. 533-542  
 Pacy, P.J. 597-606  
 Pal, C. 225-233  
 Pannier, B.M. 87-93  
 Park, R.H.R. 727-732  
 Parker, S.G. 211-217  
 Pasternack, A. 427-432  
 Patriarca, M. 727-732  
 Patterson, M.A. 491-499  
 Paultre, C.Z. 651-655  
 Pearce, N. 14-17  
 Pena, F. 345-350  
 Persson, P.B. 1-2  
 Petersson, B. 479-484  
 Phillips, P.A. 671-674  
 Pillai, R. 269-275  
 Pinna, G. 103-109, 733  
 Playford, R.J. 401-403  
 Podjarny, E. 623-627  
 Pomeranz, A. 623-627  
 Poston, L. 245-255, 519-524  
 Potter, J.F. 185-190  
 Pozet, N. 651-655  
 Pryce, D.W. 191-196  
  
 Quinn-Baker, A. 141-147  
 Quyyumi, A.A. 533-542  
  
 Ramsay, L. 263-268  
 Rathaus, M. 623-627  
 Reed, J.W. 447-452  
 Reid, I.A. 657-663  
 Reid, I.R. 12-14  
  
 Rennard, S.I. 337-344  
 Reynolds, T.M. 243  
 Rezzonico, R. 345-350  
 Richards, A.M. 3, 18-21  
 Richardson, P.J. 263-268  
 Risvanis, J. 671-674  
 Ritter, J.M. 111-117  
 Robbins, R. 337-344  
 Roberts, N.B. 47-50  
 Rolfe, P. 359-364  
 Rousselot, M. 293-299  
 Ruban, E. 359-364  
 Rueckert, P.A. 643-649  
 Russell, G.I. 359-364  
 Russell, R.I. 727-732  
 Rutherford, O.M. 67-71  
 Ryge, C. 543-550  
  
 Sacra, P. 47-50  
 Sahlin, K. 687-693  
 Sakurai, M. 581-585  
 Salter, A.M. 373-374  
 Samani, N.J. 635-641, 665-670  
 Sandström, B. 375-392  
 Saxerholt, H. 285-292  
 Schaad, N.C. 607-610  
 Schalekamp, M.A.D.H. 657-679  
 Schaper, N.C. 421-426  
 Schiffrin, E.L. 277-283, 611-622  
 Schoenfeld, N. 365-369  
 Schott, J. 67-71  
 Schulz, P.-E. 607-610  
 Schwarting, K. 39-45  
 Scirocco, M.C. 331-336  
 Scott, J.M. 73-79, 471-477  
 Seed, W.A. 179-184  
 Sekino, N. 203-210  
 Sériès, F. 707-712  
 Shibahara, S. 581-585  
 Shoji, S. 337-344  
 Simonsen, L. 543-550  
 Skottner, A. 285-292  
 Sleight, P. 103-109, 733  
 Slutsker, L. 563-570  
 Sönksen, P.H. 225-233  
 Stauss, H.M. 1-2  
 Stender, S. 375-392  
 Struthers, A.D. 81-86  
 Sturniolo, G.S. 727-732  
 Subhan, M.M.F. 447-452  
 Suzuki, E. 413-419  
 Suzuki, H. 581-585  
  
 Suzuki, Y. 413-419  
 Sztern, M. 365-369  
  
 Tachibana, Y. 203-210  
 Takahashi, K. 581-585  
 Takahashi, T. 29-37  
 Tappia, P.S. 485-489  
 Tavazzi, L. 103-109, 733  
 Taylor, E.A. 695-700  
 Taylor, P.D. 245-255, 519-524  
 Taylor, W.H. 47-50  
 Ten Cate, H. 587-594  
 Ten Cate, J.W. 587-594  
 Theodorsson, E. 165-172  
 Thomas, S.H.L. 447-452  
 Thomson, N.C. 433-437  
 Thorniley, M.S. 359-364  
 Tomino, Y. 29-37  
 Tooke, J.E. 501-508  
 Touyz, R.M. 277-283  
 Travis, S.P.L. 51-57  
 Trippenbach, T. 345-350  
 Troughton, K.L. 485-489  
 Tsigos, C. 533-542  
 Tzai, T.-S. 701-706  
  
 Umpleby, M. 225-233  
  
 Vallin, H. 165-172  
 Van den Meiracker, A.H. 675-679  
 Van der Poll, T. 587-594  
 Van der Schaaf, M.R. 719-725  
 Van Tol, A. 719-725  
 Vaughan, D.L. 359-364  
 Vial, Y. 607-610  
 Villain, E. 95-102  
 Villena-Cabrera, N. 345-350  
 Von Essen, S. 337-344  
  
 Waeber, B. 607-610  
 Walker, B.E. 131-133  
 Wallberg-Henriksson, H. 301-306  
 Walls, J. 405-412  
 Wang, L. 557-562  
 Watkins, Y. 67-71  
 Watt, G.C.M. 665-670  
 Watts, G.F. 225-233  
 Webb, G.D. 695-700  
 Webster, N.R. 131-133  
 Weir, D.G. 73-79, 471-477  
 Weise, F. 87-93

- Weissberg, P.L. 263–268  
 Wernerman, J. 479–484  
 Westaby, S. 269–275  
 Wheeldon, N.M. 159–164  
 White, H.D. 21–24  
 White, P.C. 563–570  
 Why, H.J.F. 263–268
- Wickramasinghe,  
 Y.A.B.D. 359–364  
 Wiesel, M.-L. 149–157  
 Williams, B. 141–147  
 Williams, G. 191–196, 421–426  
 Wilmshurst, P. 595  
 Wong, F. 525–531
- Yamanouchi, T. 203–210  
 Yeo, S.-B. 695–700  
 Young, P. 471–477  
 Young, P.B. 73–79
- Zierath, J.R. 301–306

## Volume 88

## SUBJECT INDEX

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

- Absorption  
 jejunum, polyunsaturated fat 219–224
- Acetaldehyde adducts  
 immunoblotting, alcoholic heart muscle disease 263–268
- Acetylcholine  
 resistance artery, diabetes 519–524
- Acute gastric erosions  
 cat, human pepsins 47–50
- Acute myocardial ischaemia  
 natriuretic peptides, exercise 551–556
- Acute renal failure  
 bile duct ligation, glomerular thromboxane A<sub>2</sub> synthesis 39–45
- S*-Adenosylcysteine  
 brain, vitamin B<sub>12</sub> 471–477
- S*-Adenosylhomocysteine  
 methylation ratio, brain 73–79
- S*-Adenosylmethionine  
 brain, vitamin B<sub>12</sub> 471–477  
 methylation ratio, brain 73–79
- Adrenal glands  
 metadrenaline 533–542
- Adrenalectomy  
 metadrenaline 533–542
- Adrenaline  
 bronchoconstriction 439–446  
 platelet aggregation, cardiopulmonary bypass 269–275
- $\alpha_2$ -Adrenoceptors  
 vascular reactivity, diabetic nephropathy 421–426
- $\beta$ -Adrenoceptors  
 G-protein  $\alpha$ - and  $\beta$ -subunits, atrium 571–580
- Adrenocorticotrophic hormone  
 regulation of secretion 4–7
- Ageing  
 Kupffer cells, endotoxin 211–217
- $\beta$ -Agonists  
 angiotensin-converting enzyme 433–437  
 ‘New Zealand asthma mortality epidemic’ 14–17
- Airway epithelial cells  
 neutrophil chemotaxis, cigarette smoke 377–344
- Airways resistance  
 capsaicin, fenspiride 325–330
- Alanine  
 catabolism, growth factors 285–292
- Albumin  
 glomerular filtration rate, diabetes 413–419
- Albumin synthesis  
 feeding, stable isotopes 235–242
- Albuminuria  
 blood pressure, elderly 185–190
- Alcoholic heart muscle disease  
 acetaldehyde adducts, immunoblotting 263–268
- Alkali-soluble protein  
 skeletal muscle, weight loss 479–484
- Allopurinol  
 ischaemia, kidney 359–364
- Amiloride  
 platelet aggregation, endothelin 277–283
- Amino acid requirements  
 protein turnover 597–606\*

- Amino acids  
 McArdle's disease 687–693
- Amylin  
 roles in physiology, pathology and  
 therapeutics 7–12
- Anaplerosis  
 McArdle's disease 687–693
- Angina pectoris  
 natriuretic peptides, exercise 551–556
- Angiotensin  
 $\beta_2$ -agonists 433–437  
 DNA and RNA synthesis, fibroblasts 557–562  
 lithium, tubular reabsorption 351–358
- Angiotensin-converting enzyme  
 $\beta_2$ -agonists 433–437
- 1,5-Anhydroglucitol  
 total parenteral nutrition, renal tubular  
 function 203–210
- Anti-inflammatory drugs  
 $\alpha_1$ -antitrypsin, neutrophils 331–336
- Antibodies  
 acetaldehyde adducts, alcoholic heart muscle  
 disease 263–268
- Antidiuretic hormone  
 hepatocytes, diabetes 671–674  
 urine concentration, parathyroid  
 hormone 197–201
- Antioxidant defences  
 cigarette smoking 485–489
- $\alpha_1$ -Antitrypsin  
 neutrophils, sulphonamides 331–336
- Apolipoprotein B-100  
 hepatic secretion, obesity 225–233
- L-Arginine  
 nitric oxide, endothelial cells 135–139
- Asthma  
 'New Zealand mortality epidemic',  
 $\beta$ -agonists 14–17  
 sympathetic nervous system 439–446
- Atherosclerosis  
 microalbuminuria, transvascular albumin  
 leakage 629–633  
 vascular permeability factor,  
 endothelium 141–147
- Atrial natriuretic peptide  
 angina pectoris, exercise 551–556  
 glomerular filtration rate, diabetes 413–419  
 haemodynamics, cardiac pacing 165–172  
 renin-angiotensin system 81–86  
 studies in New Zealand 18–21
- Atrium  
 G-protein  $\alpha$ - and  $\beta$ -subunits,  $\beta$ -adrenoceptor  
 blockade 571–580
- Autonomic nervous system  
 heart rate variability, spectral analysis 103–109  
 heart transplantation, spectral analysis 95–102
- Autoregulation  
 microcirculation, heart failure 501–508\*
- Bacteria  
 renal tract, betaines 25–27
- Baroreflex sensitivity  
 heart rate variability, spectral analysis 103–109  
 power spectral analysis, heart rate 1–2  
 statistical dependence 651–655
- Betaines  
 bacteria, renal tract 25–27
- Bile duct ligation  
 glomerular thromboxane A<sub>2</sub> synthesis, acute  
 renal failure 39–45
- Blood flow  
 venous occlusion plethysmography 643–649
- Blood pressure  
 albuminuria, elderly 185–190  
 endothelin 509–517  
 head-down tilt, spectral analysis 87–93  
 heart transplantation, spectral analysis 95–102  
 insulin resistance, dietary fructose 719–725  
 kidney, genetics 665–670  
 power spectral analysis, autonomic nervous  
 system 1–2  
 proteinuria, thromboxane receptor  
 antagonists 623–627  
 resistance arteries, endothelium 611–622
- Blood volume  
 carotid baroreceptors, orthostatic  
 hypotension 463–470
- Body composition  
 dual-energy X-ray absorptiometry 319–324
- Bone density  
 research in Auckland 12–14
- Bradykinin  
 resistance artery, diabetes 519–524
- Brain  
 hypomethylation, vitamin B<sub>12</sub> 471–477  
 methyltransferases, vitamin B<sub>12</sub> 73–79
- Brain natriuretic peptide  
 angina pectoris, exercise 551–556  
 left ventricular filling, Doppler  
 echocardiography 159–164  
 renin-angiotensin system 81–86  
 studies in New Zealand 18–21
- Breathing pattern  
 altitude, newborn infants 345–350
- Breathlessness  
 morphine inhalation, exercise 447–452
- 5-Bromodeoxyuridine  
 cell cycle, cell proliferation 119–130\*
- Bronchoconstriction  
 sympathetic nervous system 439–446

- n-Butyrate  
 gangliosides, colonic cancer 491–499
- Calcium  
 endothelin, protein kinase C 277–283  
 parathyroid hormone, urine  
 concentration 197–201
- Calcium absorption  
 intestine, stable strontium 243–244
- Calcium pump  
 membrane fluidity, hyperlipidaemia 307–310
- Calphostin C  
 platelet aggregation, endothelin 277–283
- Cancer  
 alkali-soluble protein, skeletal muscle 479–484  
 colon, gangliosides 491–499
- Capillary  
 haemodynamics, heart failure 501–508\*
- Capsaicin  
 airways resistance, fenspiride 325–330
- Carbohydrate metabolism  
 regulation, amylin 7–12
- Cardiac pacing  
 haemodynamics, atrial natriuretic  
 peptide 165–172
- Cardiomyopathy  
 acetaldehyde adducts, immunoblotting 263–268
- Cardiopulmonary bypass  
 platelet aggregation, adrenaline 269–275
- Cardiopulmonary receptors  
 head-down tilt, spectral analysis 87–93
- Carotid baroreceptors  
 plasma volume, orthostatic  
 hypotension 463–470
- Catabolism  
 total parenteral nutrition, growth  
 factors 285–292
- Catechol-*o*-methyltransferase  
 metadrenaline 533–542
- Cell cycle  
 assessment of cell proliferation 119–130\*
- Cell lineage  
 myocytes, retrovirus 257–262
- Cell proliferation  
 methods of assessment 119–130\*
- Chemokines  
 infection 393–400
- Cholesterol esterification  
 pregnancy 311–318
- Cholinesterase  
 nitric oxide, endothelium 111–117
- Chronic obstructive pulmonary disease  
 fenspiride 325–330  
 motor control, tracking task 453–461
- Cigarette smoking  
 cytokines, antioxidant defences 485–489  
 neutrophil chemotaxis, airway epithelial  
 cells 337–344
- Cirrhosis  
 venous responsiveness, noradrenaline 525–531
- Citrate  
 McArdle's disease 687–693
- Clinical research  
 progress in New Zealand 3–27
- Clonidine  
 vascular reactivity, diabetic  
 nephropathy 421–426
- Collecting tubule  
 rubidium uptake, insulin resistance 293–299
- Colon  
 ion transport, platelet-activating factor 51–57
- Colonic cancer  
 gangliosides, n-butyrate 491–499
- Confocal microscopy  
 connexin, gap junctions 257–262
- Congestive heart failure  
 continuous positive airway pressure,  
 haemodynamics 173–178
- Connexin  
 gap junctions, confocal microscopy 257–262
- Continuous ambulatory peritoneal dialysis  
 diabetes, insulin action 427–432
- Continuous positive airway pressure  
 haemodynamics, congestive heart  
 failure 173–178  
 respiratory efforts 707–712
- Contractile properties  
 skeletal muscle, growth hormone  
 deficiency 67–71
- Control of breathing  
 altitude, newborn infants 345–350  
 tracking task, chronic obstructive pulmonary  
 disease 453–461
- Copper stable isotopes  
 kinetic studies, Wilson's disease 727–732
- Coproporphyrin  
 uroporphyrin, haem arginate 365–369
- Coronary artery flow  
 exercise, nitrates 635–641
- Corticotrophin  
 regulation of secretion 4–7
- Cyclic GMP  
 glomerular filtration rate, atrial natriuretic  
 peptide 413–419
- Cyclo-oxygenase  
 endothelium, hypertension 611–622
- Cytokines  
 cigarette smoking 485–489  
 protein synthesis, dietary fats 59–66  
 sepsis, plasminogen activator 587–594

- Daltroban  
 bile duct ligation, acute renal failure 39–45  
 proteinuria, blood pressure 623–627
- Danish Nutrition Council  
*trans* fatty acids 375–392
- Decompression illness  
 cardiorespiratory abnormalities 595–596
- Diabetes  
 endothelin, resistance artery 519–524  
 endothelium 245–255\*  
 glomerular filtration rate, atrial natriuretic peptide 413–419  
 glycosylated haemoglobin, semi-carbazide-sensitive amine oxidase 675–679  
 insulin action, continuous ambulatory peritoneal dialysis 427–432  
 islet amyloid 7–12  
 neuropathy, flow motion 191–196  
 vascular reactivity, clonidine 421–426  
 vasopressin receptor, hepatocytes 671–674
- Dietary fats  
 protein synthesis, cytokines 59–66
- Dietary fructose  
 insulin resistance, blood pressure 719–725
- Dihydroxyphenylglycol  
 metadrenaline 533–542
- Direct analysis  
 fat mass, dual-energy X-ray absorptiometry 319–324
- Disseminated intravascular coagulation  
 vascular smooth muscle, thrombin 149–157
- Diurnal cycling  
 amino acid requirements 597–606\*
- DNA  
 skeletal muscle, weight loss 479–484
- DNA synthesis  
 fibroblasts, angiotensin IV 557–562
- Doppler echocardiography  
 left ventricular filling, brain natriuretic peptide 159–164
- Doppler ultrasound  
 coronary artery flow, nitrates 635–641
- Dual-energy X-ray absorptiometry  
 body composition 319–324
- Edrophonium  
 nitric oxide, endothelium 111–117
- Eicosanoids  
 endothelium, hypertension 611–622
- Elderly  
 albuminuria, blood pressure 185–190
- Electrolytes  
 blood pressure, genetics 665–670
- Endothelial cells  
 nitric oxide, L-arginine 135–139
- Endothelin  
 blood pressure 509–517  
 focal glomerular sclerosis, low-protein diet 29–37  
 hypertension 509–517  
 platelet aggregation, protein kinase C 277–283
- Endothelin receptors  
 focal glomerular sclerosis, low-protein diet 29–37
- Endothelium  
 cholinesterase, nitric oxide 111–117  
 insulin-dependent diabetes mellitus 245–255\*  
 microcirculation, heart failure 501–508\*  
 resistance arteries, hypertension 611–622  
 resistance artery, diabetes 519–524  
 vascular permeability factor, atherosclerosis 141–147
- Endothelium-derived relaxing factor  
 pregnancy 607–610  
 resistance arteries, hypertension 611–622
- Endotoxin  
 cytokines, dietary fats 59–66  
 Kupffer cells, ageing 211–217
- Energy expenditure  
 glucose-induced thermogenesis 543–550
- Epidermal growth factor  
 mucosal healing 401–403
- Erythrocytes  
 membrane function, hyperlipidaemia 307–310  
 metabolic acidosis, inorganic phosphate 405–412
- Exercise  
 breathlessness, morphine inhalation 447–452  
 coronary artery flow, Doppler ultrasound 635–641  
 natriuretic peptides, angina pectoris 551–556
- Family studies  
 kidney, hypertension 665–670
- Fat mass  
 dual-energy X-ray absorptiometry, direct analysis 319–324
- Feeding  
 albumin synthesis, stable isotopes 235–242
- Fenspiride  
 airway resistance, capsaicin 325–330
- Ferritin  
 urological disease 701–706
- Fetus  
 lipoprotein metabolism 311–318
- Fibrinolysis  
 sepsis, plasminogen activator 587–594
- Flow cytometry  
 assessment of cell proliferation 119–130\*



- Flow motion  
  neuropathy, diabetes 191–196
- Focal glomerular sclerosis  
  endothelin, low-protein diet 29–37
- Folate  
  methyltransferases, brain 73–79
- Free fatty acids  
  kinetics, insulin 681–686
- Fructose  
  insulin resistance, blood pressure 719–725
- Frusemide  
  renin secretion, nitric oxide 657–663
- Fumarate  
  McArdle's disease 687–693
- Gangliosides  
  colonic cancer, n-butyrate 491–499
- Gap junctions  
  connexin, confocal microscopy 257–262
- Gas chromatography–mass spectrometry  
  very-low-density lipoprotein apolipoprotein  
  B-100, density 225–233
- Gastric erosions  
  cat, human pepsins 47–50
- Gastrointestinal ulceration  
  intestinal trefoil factor, epidermal growth  
  factor 401–403
- Genetics  
  blood pressure, kidney 665–670
- Glomerular filtration rate  
  atrial natriuretic peptide, diabetes 413–419  
  parathyroid hormone, urine  
  concentration 197–201
- Glomerular thromboxane A<sub>2</sub> synthesis  
  bile duct ligation, acute renal failure 39–45
- Glucose  
  atrial natriuretic peptide, glomerular filtration  
  rate 413–419  
  thermogenesis, splanchnic and leg  
  tissue 543–550
- Glucose intolerance  
  glucose transport, skeletal muscle 301–306
- Glucose metabolism  
  insulin action, continuous ambulatory peritoneal  
  dialysis 427–432
- Glucose transport  
  skeletal muscle, glucose intolerance 301–306
- Glycerol  
  insulin 681–686
- Glycogenolysis  
  McArdle's disease 687–693
- Glycolysis  
  inorganic phosphate, metabolic  
  acidosis 405–412
- Glycosylated haemoglobin  
  diabetes, semi-carbazide-sensitive amine  
  oxidase 675–679
- Goto–Kakizaki rat  
  glucose transport, skeletal muscle 301–306
- G-protein  
   $\alpha$ - and  $\beta$ -subunits, atrium 571–580
- Growth hormone  
  alanine, catabolism 285–292
- Growth hormone deficiency  
  skeletal muscle, contractile properties 67–71
- GTPase-activating protein  
  neurofibrin, neurofibromatosis 581–585
- Haem arginate  
  uroporphyrin, coproporphyrin 365–369
- Haemodynamics  
  cardiac pacing, atrial natriuretic  
  peptide 165–172  
  continuous positive airway pressure, congestive  
  heart failure 173–178  
  head-down tilt, spectral analysis 87–93  
  microcirculation, heart failure 501–508\*
- Haemostasis  
  cardiopulmonary bypass, adrenaline 269–275
- Head-down tilt  
  haemodynamics, spectral analysis 87–93
- Heart  
  gap junctions, connexin 257–262
- Heart failure  
  heart rate variability, spectral analysis 103–109  
  metadrenaline 533–542  
  microcirculation, haemodynamics 501–508\*
- Heart rate  
  head-down tilt, spectral analysis 87–93  
  heart transplantation, spectral analysis 95–102  
  power spectral analysis, autonomic nervous  
  system 1–2
- Heart rate variability  
  spectral analysis, baroreflex sensitivity 103–109
- Heart transplantation  
  blood pressure, spectral analysis 95–102
- Heat shock protein  
  infection 393–400
- Heparin  
  vascular smooth muscle, thrombin 149–157
- Hepatocytes  
  vasopressin receptor, diabetes 671–674
- Hering–Breüer reflexes  
  altitude, newborn infants 345–350
- Hirudin  
  platelet aggregation, adrenaline 269–275  
  vascular smooth muscle, thrombin 149–157
- Human pepsins  
  acute gastric erosions, cat 47–50

- Hyperaldosteronism  
   hypertension, hereditary 563–570
- Hyperalimentation  
   1,5-anhydroglucitol, renal tubular function 203–210
- Hyperlipidaemia  
   calcium pump, membrane fluidity 307–310
- Hyperphosphataemia  
   metabolic acidosis, uraemia 405–412
- Hypertension  
   albuminuria, elderly 185–190  
   endothelin 509–517  
   hereditary, hyperaldosteronism 563–570  
   kidney, genetics 665–670  
   metadrenaline 533–542  
   resistance arteries, endothelium 611–622  
   rubidium uptake, nephron 293–299
- Hypomethylation  
   brain, vitamin B<sub>12</sub> 73–79, 471–477
- Hypoxia  
   vagal reflexes, newborn infants 345–350
- Idiopathic pulmonary fibrosis  
   superoxide dismutase 371
- Infarct artery patency  
   thrombolytic therapy 21–24
- Infection  
   chemokines 393–400
- Inflammation  
   urinary ferritin 701–706
- Inflammatory bowel disease  
   platelet-activating factor, synthesis *de novo* 713–717
- Inhalation  
   morphine, breathlessness 447–452
- Inorganic phosphate  
   metabolic acidosis, uraemia 405–412
- Insulin  
   free fatty acids, kinetics 681–686
- Insulin action  
   diabetes, continuous ambulatory peritoneal dialysis 427–432
- Insulin resistance  
   blood pressure, dietary fructose 719–725  
   glucose transport, skeletal muscle 301–306  
   obesity and hypertension, amylin 7–12  
   rubidium uptake, nephron 293–299  
   very-low-density lipoprotein apolipoprotein B-100, obesity 225–233
- Insulin sensitivity  
   insulin action, continuous ambulatory peritoneal dialysis 427–432
- Insulin-like growth factor-I  
   alanine, catabolism 285–292  
   free fatty acids, kinetics 681–686  
   muscle strength, growth hormone deficiency 67–71
- Interleukin-1  
   Kupffer cells, endotoxin 211–217
- Interleukin-6  
   cigarette smoking 485–489  
   fibrinolysis, sepsis 587–594  
   Kupffer cells, endotoxin 211–217
- Interleukin-8  
   infection 393–400
- Internal mammary graft  
   exercise, nitrates 635–641
- Intestinal trefoil factor  
   mucosal healing 401–403
- Intestine  
   calcium absorption, stable strontium 243–244
- Intraperitoneal insulin  
   metabolic effects, continuous ambulatory peritoneal dialysis 427–432
- Ion transport  
   platelet-activating factor, distal colon 51–57
- Ischaemia  
   kidney, allopurinol 359–364
- Jejunum  
   absorption, polyunsaturated fat 219–224
- Ki-67  
   cell cycle, cell proliferation 119–130\*
- Kidney  
   blood pressure, genetics 665–670  
   ischaemia, allopurinol 359–364
- <sup>81m</sup>Kr  
   ventilation–perfusion inequality 179–184
- Kupffer cells  
   endotoxin, ageing 211–217
- Laser Doppler flowmetry  
   neuropathy, diabetes 191–196
- Lean mass  
   dual-energy X-ray absorptiometry, direct analysis 319–324
- Left ventricular filling  
   Doppler echocardiography, brain natriuretic peptide 159–164
- Leucocytes  
   sodium–potassium-dependent adenosine triphosphatase, potassium 695–700
- Leukotrienes  
   Kupffer cells, endotoxin 211–217
- Lipoproteins  
   pregnancy 311–318
- Lithium  
   tubular reabsorption, angiotensin II 351–358

- Low-protein diet  
  endothelin gene expression, focal glomerular sclerosis 29–37
- Lymphocytes  
  sodium–potassium-dependent adenosine triphosphatase, potassium 695–700
- Macula densa  
  renin secretion, nitric oxide 657–663
- Malaria  
  chemokines 393–400
- Malate  
  McArdle's disease 687–693
- Membrane cholesterol  
  erythrocytes, hyperlipidaemia 307–310
- Membrane fluidity  
  calcium pump, hyperlipidaemia 307–310
- Messenger RNA  
  vasopressin receptor, diabetes 671–674
- Metabolic acidosis  
  inorganic phosphate, uraemia 405–412
- Metadrenaline  
  sympathetic nervous system 533–542
- Methacholine  
  nitric oxide, endothelium 111–117
- Methionine synthase  
  methylation ratio, brain 73–79
- Methylation ratio  
  brain, vitamin B<sub>12</sub> 471–477  
  methyltransferases, brain 73–79
- Methyltransferases  
  vitamin B<sub>12</sub>, brain 73–79
- Mevalonic acid  
  very-low-density lipoprotein apolipoprotein B-100, obesity 225–233
- Microalbuminuria  
  diabetes, vascular reactivity 421–426  
  transvascular albumin leakage 629–633
- Microcirculation  
  haemodynamics, heart failure 501–508\*
- Monoamine oxidase  
  metadrenaline 533–542
- Monocyte chemotactic protein  
  infection 393–400
- Morphine  
  inhalation, breathlessness 447–452
- Motor control  
  tracking task, chronic obstructive pulmonary disease 453–461
- Mucosal healing  
  intestinal trefoil factor, epidermal growth factor 401–403
- Muscarinic receptors  
  nitric oxide, endothelium 111–117
- Muscle contraction  
  tricarboxylic acid cycle, McArdle's disease 687–693
- Muscle strength  
  insulin-like growth factor-I, growth hormone deficiency 67–71
- Myocardial infarction  
  thrombolytic therapy, left ventricular function 21–24
- Myocytes  
  connexin, gap junctions 257–262
- Natriuretic peptides  
  studies in New Zealand 18–21
- Near-infrared spectroscopy  
  ischaemia, kidney 359–364
- Neonatal respiration  
  vagal reflexes, altitude 345–350
- Nephron  
  rubidium uptake, insulin resistance 293–299
- Neurofibroma  
  neurofibrin, GTPase-activating protein 581–585
- Neurofibromatosis  
  neurofibrin, GTPase-activating protein 581–585
- Neurofibromin  
  GTPase-activating protein, neurofibromatosis 581–585
- Neuropathy  
  diabetes, flow motion 191–196
- Neuropeptide Y  
  bronchoconstriction 439–446
- Neutrophil chemotaxis  
  airway epithelial cells, cigarette smoking 337–344
- Neutrophils  
   $\alpha_1$ -antitrypsin, sulphonamides 331–336
- New Zealand  
  progress in clinical research 3–27
- 'New Zealand asthma mortality epidemic'  
   $\beta$ -agonists 14–17
- Newborn infants  
  vagal reflexes, altitude 345–350
- Nitrates  
  coronary artery flow, Doppler ultrasound 635–641
- Nitric oxide  
  cholinesterase, endothelium 111–117  
  endothelial cells, L-arginine 135–139  
  endotoxin shock, thrombin 149–157  
  insulin-dependent diabetes mellitus 245–255\*  
  pregnancy 607–610  
  renin secretion, macula densa 657–663  
  resistance arteries, hypertension 611–622  
  resistance artery, diabetes 519–524  
  septic shock 131–133

- Nitric oxide synthase  
 endothelial cells, L-arginine 135–139  
 septic shock 131–133  
*N<sup>G</sup>*-Nitro-L-arginine methyl ester  
 renin secretion, macula densa 657–663
- Nitrogen balance  
 amino acid requirements 597–606\*
- Nitrous oxide  
 methylation ratio, brain 73–79
- Noradrenaline  
 bronchoconstriction 439–446  
 vascular reactivity, diabetic nephropathy 421–426  
 venous responsiveness, cirrhosis 525–531
- Normetadrenaline  
 sympathetic nervous system 533–542
- Norrie disease  
 metadrenaline 533–542
- Obesity  
 very-low-density lipoprotein apolipoprotein B-100, insulin resistance 225–233
- Oedema  
 microcirculation, heart failure 501–508\*
- Orthophosphate  
 metabolic acidosis, uraemia 405–412
- Orthostatic hypotension  
 carotid baroreceptors, plasma volume 463–470
- Osteoporosis  
 research in Auckland 12–14
- Ouabain  
 sodium–potassium-dependent adenosine triphosphatase, lymphocytes 695–700
- Oxidative metabolism  
 McArdle's disease 687–693
- Oxygen uptake  
 glucose-induced thermogenesis 543–550
- Parathyroid hormone  
 urine concentration, arginine vasopressin 197–201
- Patent foramen ovale  
 decompression illness 595–596
- Pepsins  
 acute gastric erosions, cat 47–50
- Permeability  
 distal colon, platelet-activating factor 51–57
- Phaeochromocytoma  
 metadrenaline 533–542
- Phenylephrine  
 vascular reactivity, diabetic nephropathy 421–426
- Plasma volume  
 carotid baroreceptors, orthostatic hypotension 463–470
- Plasminogen activator  
 fibrinolysis, sepsis 587–594
- Plasminogen activator inhibitor 1  
 fibrinolysis, sepsis 587–594
- Platelet aggregation  
 cardiopulmonary bypass, adrenaline 269–275  
 endothelin, protein kinase C 277–283
- Platelet-activating factor  
 ion transport, distal colon 51–57  
 synthesis *de novo*, inflammatory bowel disease 713–717
- Platelet-derived growth factor  
 endothelium, atherosclerosis 141–147
- Polyamine  
 cell cycle, cell proliferation 119–130\*
- Polyol  
 total parenteral nutrition, renal tubular function 203–210
- Polyunsaturated fat  
 jejunal function 219–224
- Porphobilinogen deaminase  
 uroporphyrin, haem arginate 365–369
- Postmenopausal osteoporosis  
 research in Auckland 12–14
- Potassium  
 sodium–potassium-dependent adenosine triphosphatase, lymphocytes 695–700
- Potassium channels  
 endothelium, hypertension 611–622
- Power spectral analysis  
 heart rate, blood pressure 1–2
- Pre-ascitic cirrhosis  
 venous responsiveness, noradrenaline 525–531
- Pre-eclampsia  
 nitric oxide 607–610
- Pregnancy  
 lipoprotein metabolism 311–318  
 nitric oxide 607–610
- Proliferating cell nuclear antigen  
 cell cycle, cell proliferation 119–130\*
- Prostaglandins  
 Kupffer cells, endotoxin 211–217
- Protein  
 hypomethylation, vitamin B<sub>12</sub> 471–477
- Protein kinase C  
 endothelin, platelet aggregation 277–283
- Protein synthesis  
 cytokines, dietary fats 59–66
- Protein turnover  
 amino acid requirements 596–606\*
- Proteinuria  
 blood pressure, thromboxane receptor antagonists 623–627
- Proximal convoluted tubule  
 rubidium uptake, insulin resistance 293–299

- Pulmonary artery pressure  
fenspiride 325–330
- Renal tract  
bacteria, betaines 25–27
- Renal tubular function  
total parenteral nutrition,  
1,5-anhydroglucitol 203–210
- Renin–angiotensin system  
 $\beta_2$ -agonists 433–437  
natriuretic peptides 81–86
- Renin secretion  
macula densa, nitric oxide 657–663
- Resistance arteries  
endothelium, diabetes 519–524  
endothelium, hypertension 611–622
- Respiratory efforts  
upper airway pressure 707–712
- Retrovirus  
cell lineage, myocytes 257–262
- RNA  
skeletal muscle, weight loss 479–484
- RNA synthesis  
fibroblasts, angiotensin IV 557–562
- Rubidium uptake  
nephron, insulin resistance 293–299
- Secretion  
jejunum, polyunsaturated fat 219–224
- Semi-carbazide-sensitive amine oxidase  
diabetes, glycosylated haemoglobin 675–679
- Sepsis  
chemokines 393–400  
fibrinolysis, plasminogen activator 587–594  
nitric oxide synthase 131–133
- Serum lipids  
insulin action, continuous ambulatory peritoneal  
dialysis 427–432
- Sialic acid  
colonic cancer, n-butyrate 491–499
- Skeletal muscle  
alkali-soluble protein, weight loss 479–484  
catabolism, growth factors 285–292  
contractile properties, growth hormone  
deficiency 67–71  
glucose transport, glucose intolerance 301–306  
glucose-induced thermogenesis 543–550
- Sleep apnoea–hypopnoea  
respiratory efforts 707–712
- Sodium  
nephron, insulin resistance 293–299  
venous responsiveness, noradrenaline 525–531
- Sodium–potassium-dependent adenosine  
triphosphatase  
nephron, insulin resistance 293–299
- potassium, lymphocytes 695–700
- Spectral analysis  
blood pressure, heart transplantation 95–102  
haemodynamics, head-down tilt 87–93  
heart rate variability, baroreflex  
sensitivity 103–109
- Splanchnic tissues  
glucose-induced thermogenesis 543–550
- Stable isotopes  
albumin synthesis, feeding 235–242  
very-low-density lipoprotein B-100, hepatic  
secretion 225–233
- Statistical dependence  
baroreflex sensitivity 651–655
- Staurosporine  
platelet aggregation, endothelin 277–283
- Steroid osteoporosis  
research in Auckland 12–14
- Strontium  
calcium absorption, intestine 243–244
- Subacute combined degeneration  
hypomethylation, vitamin B<sub>12</sub> 471–477
- Subcutaneous insulin  
metabolic effects, continuous ambulatory  
peritoneal dialysis 427–432
- Sulphonamides  
 $\alpha_1$ -antitrypsin, neutrophils 331–336
- Superoxide dismutase  
idiopathic pulmonary fibrosis 371
- Surgery  
alkali-soluble protein, skeletal muscle 479–484
- Sympathetic nervous system  
bronchoconstriction 439–446  
metadrenaline 533–542
- Tachycardia  
cardiac pacing, atrial natriuretic  
peptide 165–172
- <sup>99m</sup>Tc  
ventilation–perfusion inequality 179–184
- Thermogenesis  
glucose, splanchnic and leg tissue 543–550
- Thick ascending limb of Henle  
rubidium uptake, insulin resistance 293–299
- Thrombin  
platelet aggregation, endothelin 277–283  
vascular smooth muscle, endotoxic  
shock 149–157
- Thrombolytic therapy  
left ventricular function, myocardial  
infarction 21–24
- Thromboxane A<sub>2</sub>  
glomerular synthesis, acute renal failure 39–45

- Thromboxane A<sub>2</sub>/prostaglandin H<sub>2</sub> receptor antagonism  
 bile duct ligation, acute renal failure 39–45
- Thromboxane receptor antagonists  
 proteinuria, blood pressure 623–627
- Thymidine  
 cell cycle, cell proliferation 119–130\*
- Thymidine incorporation  
 fibroblasts, angiotensin IV 557–562
- Tilt  
 blood pressure, heart transplantation 95–102
- Tissue factor  
 fibrinolysis, sepsis 587–594
- Tissue-type plasminogen activator  
 fibrinolysis, sepsis 587–594
- Total enteral nutrition  
 1,5-anhydroglucitol, renal tubular function 203–210
- Total parenteral nutrition  
 1,5-anhydroglucitol, renal tubular function 203–210  
 catabolism, growth factors 285–292
- Toxoplasmosis  
 chemokines 393–400
- Tracking task  
 motor control, obstructive pulmonary disease 453–461
- trans* Fatty acids  
 influence on health 373–384, 375–392
- Transfer function analysis  
 haemodynamics, head-down tilt 87–93
- Transitional cell carcinoma  
 urinary ferritin 701–706
- Transvascular albumin leakage  
 microalbuminuria, atherosclerosis 629–633
- Triacylglycerol  
 membrane function, hyperlipidaemia 307–310
- Tricarboxylic acid cycle  
 McArdle's disease 687–693
- Tuberculosis  
 chemokines 393–400
- Tubular reabsorption  
 lithium, angiotensin II 351–358
- Tumour necrosis factor  
 cigarette smoking 485–489  
 fibrinolysis, sepsis 587–594  
 Kupffer cells, endotoxin 211–217
- Tumour-infiltrating lymphocytes  
 urinary ferritin 701–706
- Upper airway pressure  
 respiratory efforts 707–712
- Uraemia  
 metabolic acidosis, inorganic phosphate 405–412
- Uridine incorporation  
 fibroblasts, angiotensin IV 557–562
- Urinary albumin excretion  
 transvascular albumin leakage, atherosclerosis 629–633
- Urine concentration  
 parathyroid hormone, arginine vasopressin 197–201
- Urological disease  
 ferritin 701–706
- Uroporphyrin  
 coproporphyrin, haem arginate 365–369
- Vagal reflexes  
 altitude, newborn infants 345–350
- Variability  
 blood pressure, heart transplantation 95–102
- Vascular conductance  
 venous occlusion plethysmography 643–649
- Vascular permeability factor  
 endothelium, atherosclerosis 141–147
- Vascular reactivity  
 diabetic nephropathy, clonidine 421–426
- Vascular smooth muscle  
 endotoxic shock 149–157  
 vascular permeability factor, atherosclerosis 141–147
- Vasoconstriction  
 endothelin, hypertension 509–517
- Vasodilatation  
 resistance artery, diabetes 519–524  
 venous occlusion plethysmography 643–649
- Vasomotion  
 neuropathy, diabetes 191–196
- Vasopressin  
 haemodynamics, cardiac pacing 165–172
- Vasopressin receptor  
 hepatocytes, diabetes 671–674
- Venous occlusion plethysmography  
 blood flow 643–649
- Venous responsiveness  
 noradrenaline, pre-ascitic cirrhosis 525–531
- Ventilation  
 fenspiride 325–330
- Ventilation–perfusion inequality  
<sup>81m</sup>Kr, <sup>99m</sup>Tc 179–184
- Very-low-density lipoprotein apolipoprotein B-100  
 hepatic secretion, obesity 225–233
- Vitamin B<sub>12</sub>  
 hypomethylation, brain 471–477  
 methyltransferases, brain 73–79
- Weight loss  
 alkali-soluble protein, skeletal muscle 479–484
- Wilson's disease  
 copper stable isotopes, kinetic studies 727–732

(Contents continued)

- Biosynthesis of platelet-activating factor in normal and inflamed human colon mucosa: evidence for the involvement of the pathway of platelet-activating factor synthesis *de novo* in inflammatory bowel disease *by* C. B. APPLEYARD and K. HILLIER 713-717
- Long-term fructose versus corn starch feeding in the spontaneously hypertensive rat *by* M. R. VAN DER SCHAAF, J. A. JOLLES, A. VAN TOL and H. A. KOOMANS 719-725
- Use of a stable copper isotope ( $^{65}\text{Cu}$ ) in the differential diagnosis of Wilson's disease *by* T. D. B. LYON, G. S. FELL, D. GAFFNEY, B. A. MCGAW, R. I. RUSSELL, R. H. R. PARK, A. D. BEATTIE, G. CURRY, R. J. CROFTON, I. GUNN, G. S. STURNIOLO, R. D'INCA and M. PATRIARCA 727-732

**CORRECTION**

- Physiology and pathophysiology of heart rate and blood pressure variability in humans: is power spectral analysis largely an index of baroreflex gain? *by* P. SLEIGHT, M. T. LA ROVERE, A. MORTARA, G. PINNA, R. MAESTRI, S. LEUZZI, B. BIANCHINI, L. TAVAZZI and L. BERNARDI, 733

**AUTHOR INDEX**

**SUBJECT INDEX**