

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

©The Medical Research Society and the Biochemical Society 1990  
ISSN 0143-5221

Printed in Great Britain by Whitstable Litho Ltd, Whitstable, Kent

# ACKNOWLEDGMENTS

The Editorial Board of *Clinical Science* gratefully acknowledges the assistance given by the following referees during the year 1989.

- Aalkjaer, C.  
Aber, G.  
Abumrad, N.N.  
Adams, P.C.  
Agius, L.  
Al Azzawi, F.  
Alberti, K.G.M.M.  
Allison, M.E.M.  
Anderson, D.C.  
Anderson, J.  
Arnold, J.  
Astrup, A.
- Baig, W.  
Bailey, C.J.  
Ball, S.G.  
Balment, R.J.  
Banga, P.  
Barnes, N.  
Baron, D.N.  
Bartoli, E.  
Barton, R.N.  
Bassey, E.J.  
Batstone, G.F.  
Baylis, P.H.  
Beastall, G.H.  
Beilin, L.J.  
Belch, J.  
Bell, J.  
Bender, D.  
Bennet, W.M.  
Bennett, G.W.  
Bennett, M.  
Bennett, T.  
Billing, B.H.  
Blaney, L.  
Bloom, S.R.  
Bobinski, H.  
Bonner, G.  
Booth, N.A.  
Borum, P.  
Boucher, R.  
Bouloux, P.  
Boyd, C.A.R.  
Bradley, J.A.  
Bremner, I.  
Broadly, K.J.  
Broughton Pipkin, F.  
Brown, E.A.  
Brown, J.  
Brown, S.B.  
Buck, A.C.  
Buhler, F.R.
- Bukowiecki, L.  
Burke, C.W.  
Burnett, D.  
Burroughs, A.K.
- Calcutt, N.A.  
Calverley, P.M.A.  
Campbell, E.J.M.  
Campbell, I.T.  
Campbell, R.D.  
Campbell, R.W.F.  
Cannata, J.B.  
Cantin, M.  
Caputi, A.P.  
Carmichael, D.  
Carr, S.J.  
Carrell, R.W.  
Causon, R.C.  
Cawood, M.  
Cederblad, G.  
Challis, R.A.J.  
Chipperfield, A.R.  
Church, M.  
Clarkes, S.W.  
Clausen, T.  
Clegg, R.A.  
Clelland, J.  
Clements, M.  
Coates, G.  
Cobbe, S.  
Cockcroft, A.  
Coleman, R.  
Collins, P.  
Connell, J.M.C.  
Conor, J.M.  
Corr, L.A.  
Coulshed, D.  
Crick, J.  
Cronstein, B.N.  
Cumming, A.D.  
Cusi, D.
- Dalziel, K.  
Dandona, P.  
Dargie, H.J.  
Davey, M.J.  
Davie, M.W.J.  
Davies, D.L.  
Davies, M.  
Davison, J.  
de Daley, B.M.  
Delle, M.  
Denison, D.M.
- DeQuattro, V.  
Dhumeaux, D.  
Dick, W.C.  
Dietz, R.  
Dolin, S.J.  
Dominiczak, A.F.  
Dormandy, J.A.  
Dryburgh, F.J.  
Dunnigan, M.G.  
Durrington, P.
- Eccles, R.  
Edmonds, M.  
Edwards, R.H.T.  
Edwards, Y.  
El Nahas, A.M.  
Elia, M.  
Elliott, H.L.  
Elwyn, D.H.  
Emery, P.W.  
Emmelin, N.  
Esler, M.  
Esnouf, M.P.  
Evans, R.D.  
Evans, T.W.  
Ewing, D.J.
- Farrell, T.G.  
Fearon, K.C.  
Feehally, J.  
Ferner, R.E.  
Ferrari, P.  
Ferrell, W.R.  
Ferriss, J.B.  
Firth, J.D.  
Flenley, D.C.  
Flores, N.  
Fogelman, I.  
Forsling, M.L.  
Forstermann, U.  
Fournier, A.  
Fox, K.A.A.  
Francis, R.M.  
Fraser, R.  
Fraser, W.D.  
Freeman, R.  
Freestone, S.  
Frick, R.  
Frier, B.M.  
Fukagawa, N.
- Galton, D.J.  
Garay, R.
- Garcia, R.  
Gardiner, S.M.  
Gardner, M.L.G.  
Gardner, W.N.  
Garland, H.O.  
Garlick, P.J.  
Garrett, J.R.  
Genest, J.  
Gibbons, G.F.  
Gibson, G.J.  
Glorioso, N.  
Godfrey, P.P.  
Gokal, R.  
Goldsmith, D.A.  
Gramb, G.  
Grant, P.J.  
Gray, B.J.  
Greaves, M.  
Green, I.C.  
Green, R.  
Greening, A.P.  
Greenwood, S.L.
- Hall, A.S.  
Halliday, D.  
Hamilton, C.A.  
Hampton, I.  
Harris, M.C.  
Haselgrove, J.  
Haslett, C.  
Hawkey, C.J.  
Hawkins, P.N.  
Hawthorne, G.C.  
Haylor, J.  
Hazleman, B.L.  
Heagerty, A.M.  
Heath, D.F.  
Hendry, B.M.  
Hennemann, G.  
Hiley, C.R.  
Hill, S.J.  
Hillson, R.M.  
Hilton, P.J.  
Himsworth, R.L.  
Hitman, G.A.  
Hjemdahl, P.  
Holgate, S.T.  
Holness, M.J.  
Horton, R.  
Hosking, D.J.  
Howie, A.J.  
Hughes, A.  
Humphries, S.
- Iggo, N.C.  
Illes, P.  
Illingworth, R.  
Ind, P.W.  
Innes, J.A.
- Jackson, A.  
Jackson, D.  
Jackson, M.  
Jacyna, M.R.  
James, P.F.W.  
Jardine, A.  
Jayne, W.  
Jeffcoate, W.J.  
Jenkins, J.S.  
Jepson, M.  
Johnston, C.I.  
Jones, C.J.H.  
Jones, D.A.  
Jones, N.L.  
Jones, P.W.  
Jowett, T.  
Jung, R.T.
- Kalsheker, N.  
Kanis, J.  
Kantelip, J.P.  
Kaumann, A.J.  
Kay, A.B.  
Keatinge, W.R.  
Kellett, G.L.  
Kendall, M.J.  
Kennedy, L.  
Kenyon, C.J.  
Kooner, J.  
Kramps, J.A.  
Krieger, J.
- Lab, M.J.  
Lahiri, A.  
Lane, R.  
Lang, R.E.  
Lanyon, L.E.  
Lassen, N.A.  
Lebrec, D.  
Lechler, R.I.  
Leckie, B.J.  
Ledingham, J.G.G.  
Lee, T.H.  
Leese, H.J.  
Leiper, J.B.  
Levin, G.E.  
Levy, J.

- Lewis, H.  
 Lewis, M.J.  
 Lichstein, D.  
 Lindsay, G.  
 Lipkin, D.  
 Lobley, G.  
 Losowsky, M.  
 Ludlam, C.A.  
 Luft, F.  
 Lund, P.  
 Lundholm, K.  
  
 MacDermot, J.  
 MacGregor, G.A.  
 Maclaren, D.P.M.  
 Maini, R.N.  
 Marin-Neto, J.A.  
 Marsh, M.  
 Marshall, J.M.  
 Marston, S.  
 Mary, D.A.S.G.  
 Mathieson, P.W.  
 Maughan, R.J.  
 Mawer, B.  
 McCreanor, G.  
 McDonald, T.T.  
 McGrath, J.C.  
 McIntyre, N.  
 McMahan, M.J.  
 McVicar, A.J.  
 McWilliam, P.N.  
 Meacham, R.  
 Milford-Ward, A.  
 Milledge, J.S.  
 Millward, A.  
 Mir, A.  
 Mollan, R.  
 Moolenaar, W.H.  
 Morgan, M.Y.  
 Morice, A.H.  
 Morley, C.J.  
 Morrison, H.  
 Morton, J.J.  
 Mowbray, J.  
 Moxham, J.  
 Murphy, G.M.  
 Murphy, S.M.  
  
 Nash, G.B.  
 Natrass, M.  
 Neuburger, J.  
 Newsholme, E.A.  
 Ng, L.L.  
 Nicholls, M.G.  
 Nimmo, I.A.  
 Noble, A.R.  
 Nunez, D.J.  
  
 O’Gorman, D.  
 Opie, L.H.  
 O’Reilly, S.  
 O’Riordan, J.L.H.  
  
 Pacy, P.J.  
 Page, R.  
 Panayi, G.S.  
 Parsons, D.S.  
 Parsons, V.  
 Pasternak, C.A.  
 Paterson, C.R.  
 Pearson, J.D.  
 Pedersen, M.M.  
 Peers, S.H.  
 Pell, J.M.  
 Penny, L.  
 Penny, W.J.  
 Percy-Robb, I.W.  
 Perrett, D.  
 Peters, T.J.  
 Pirie, S.C.  
 Podolsky, D.  
 Pounsford, J.C.  
 Price, C.P.  
 Pride, N.B.  
 Printz, M.P.  
 Prowse, C.V.  
 Purkiss, P.  
  
 Raftery, M.J.  
 Ralston, S.H.  
 Rampling, M.W.  
 Ramsden, D.B.  
 Ratcliffe, P.J.  
 Rawles, J.M.  
  
 Reeds, P.  
 Reeve, J.  
 Rennie, M.J.  
 Rettig, R.  
 Reynolds, J.J.  
 Rhodes, J.  
 Rhodes, J.M.  
 Richer-Giudicelli, Ch.  
 Riemersma, R.A.  
 Ritter, J.M.  
 Roath, S.  
 Robbins, P.A.  
 Roberts, D.H.  
 Roberts, M.  
 Robinson, B.F.  
 Rodger, I.W.  
 Rosenberg, W.  
 Rothwell, N.J.  
 Roulston, J.E.  
 Rumsby, M.G.  
 Russell, G.I.  
  
 Safar, M.  
 Sagnella, G.  
 Sanders, T.A.B.  
 Sandilands, G.P.  
 Sandle, G.I.  
 Schachter, M.  
 Schmitz, G.  
 Scott, A.K.  
 Scott, A.R.  
 Scott, J.  
 Seckl, J.R.  
 Semple, P.F.  
 Sever, P.S.  
 Seymour, C.A.  
 Shahi, J.  
 Shale, D.  
 Sharma, R.K.  
 Sheikh, M.I.  
 Shirley, D.G.  
 Shore, A.C.  
 Short, A.H.  
 Sikora, K.  
 Singer, D.R.J.  
 Slater, J.D.H.  
 Smith, R.  
  
 Soladye, O.A.  
 Solomon, L.  
 Sowers, J.R.  
 Spiller, R.  
 Steptoe, A.  
 Stevenson, J.C.  
 Stewart, P.M.  
 Stoner, H.B.  
 Strachan, T.  
 Stradling, J.R.  
 Struthers, A.D.  
 Stubbs, M.  
 Sturrock, R.D.  
 Sugden, M.C.  
 Sutters, M.  
 Swainson, C.P.  
 Swales, J.D.  
  
 Tattersfield, A.  
 Taube, D.  
 Taylor, C.M.  
 Taylor, G.  
 Taylor, R.  
 Thomas, H.C.  
 Thomas, P.  
 Thomas, R.  
 Thomas, T.  
 Thompson, C.J.  
 Thompson, D.G.  
 Thurston, H.  
 Tomson, C.R.V.  
 Tooke, J.E.  
 Trevisan, M.  
 Triffit, J.T.  
 Triger, D.R.  
 Twort, C.H.C.  
 Turner, N.  
 Turner, R.  
  
 Van Hooft, I.M.S.  
 Vann Jones, J.  
 Veelken, R.  
 Vezzoli, G.  
  
 Waeber, B.  
 Walker, A.W.  
  
 Walker, I.D.  
 Walløe, L.  
 Walls, J.  
 Walport, M.  
 Walter, S.J.  
 Wambach, G.  
 Ward, M.K.  
 Warley, A.R.H.  
 Warnes, T.W.  
 Warren, P.M.  
 Warren, R.E.  
 Wass, J.  
 Waterlow, J.C.  
 Watson, M.L.  
 Weber, W.W.  
 Weidmann, P.  
 Weissberg, P.L.  
 Westerhof, N.  
 Whalley, E.  
 Wheeler, D.C.  
 Whyte, K.F.  
 Widdicombe, J.G.  
 Wieling, W.  
 Wilcox, R.G.  
 Wilkins, M.  
 Wilkinson, M.L.  
 Wilkinson, R.  
 Williams, A.J.K.  
 Williams, B.C.  
 Williams, J.D.  
 Williams, R.  
 Williams, T.D.M.  
 Wilson, R.  
 Winney, R.J.  
 Winter, R.J.D.  
 Winterton, S.J.  
 Wiseman, M.J.  
 Withrington, P.G.  
 Woledge, R.C.  
 Wood, J.A.  
 Woodhead, J.S.  
 Woodhouse, K.  
 Woods, K.L.  
 Woolf, A.S.  
 Wray, S.  
  
 Yates, M.S.

# Volume 79

## AUTHOR INDEX

- Abraham, W.T. 429-435  
Ader, J.-L. 29-35  
Adsett, D. 505-511  
Ajao, P. 315-323  
Albano, J.D.M. 117-121  
Alberti, K.G.M.M. 167-174  
Allon, M. 123-129  
Altieri, P. 647-656  
Alvarez, A.L. 437-442  
Alvestrand, A. 299-305  
Amorena, C. 149-154  
Anderson, J.R. 239-245  
Ardawi, M.S.M. 139-147, 483-490  
Arilla, E. 451-456  
Arnolda, L. 583-589  
Atlas, S.A. 371-376  
Au, J. 377-380  
Avalle, V. 227-231
- Bachmann, F. 513-516  
Baggio, B. 113-116  
Baker, F. 259-266  
Baker, P.N. 403-408  
Bähr, V. 57-65  
Balcke, P. 471-476, 477-482  
Balter, M.S. 155-159  
Barrett, E.J. 457-466  
Barrios, V. 451-456  
Beattie, E.C. 523-530  
Bell, G.M. 371-376  
Bell, N. 89-95  
Bennett, T. 393-401  
Benthin, G. 639-645  
Bergström, J. 331-337  
Bernabeu, F. 551-558  
Bhatia, S.S. 117-121  
Bibby, D.C. 657-662  
Bloom, S.R. 619-623  
Bochner, F. 37-42  
Bohr, D.F. 415-423  
Bondy, C. 599-603  
Boni, C. 443-450  
Boolell, M. 5-8  
Boon, N.A. 377-380  
Borsatti, A. 113-116  
Bowman, H.F. 307-313  
Bradley, J.R. 239-245  
Brandi, L.S. 443-450  
Braquet, P. 551-558  
Britton, J.R. 315-323, 325-330  
Broughton Pipkin, F. 403-408
- Brown, J.E. 377-380  
Brown, M.A. 505-511  
Burns, H.J.G. 161-165  
Burrows, P.C. 175-183  
Burston, D. 267-272  
Buzzigoli, G. 443-450
- Cadoux-Hudson, T.A.D. 1-3  
Caidahl, K. 639-645  
Campbell, I.T. 605-611  
Campbell, S.K. 117-121  
Candiano, G. 647-656  
Canessa, M. 531-536  
Caro, C.G. 215-220  
Castro, A. 149-154  
Catalano, C. 167-174  
Cercignani, G. 647-656  
Cerri, M. 443-450  
Chapman, K.R. 155-159  
Chapuy, P. 467-470  
Christensen, S. 109-112  
Clear, A.S. 215-220  
Cohen, J. 619-623  
Compton, A.M. 393-401  
Connell, J.M.C. 51-55  
Conway, M. 583-589  
Coppack, S.W. 287, 339-348  
Cowley, A.J. 239-245  
Cragoe, E.J. 357-364  
Cruickshank, A.M. 161-165
- Dambrink, J.H.A. 73-79  
Davison, J.M. 631-638  
Dawson, D.J. 175-183  
De Wardener, H.E. 193-200, 289-297  
Derfler, K. 471-476  
Devynck, M.-A. 613-618  
Dickinson, C.J. 543-550  
Dolecki, M. 583-589  
Dominiczak, A.F. 415-423  
Duckworth, R. 605-611  
Dudley, C.R.K. 491-497  
Duncan, E.M. 37-42  
Dunlop, W. 631-638
- Edlund, A. 131-138  
El Nahas, A.M. 381-386  
El Sayed, A.A. 381-386  
Elborn, J.S. 89-95
- Eschenhagen, G. 57-65  
Evans, D.B. 239-245
- Fairhurst, J.A. 605-611  
Feehally, J. 259-266  
Felber, J.P. 513-516  
Felley, C.P. 513-516  
Ferrannini, E. 443-450  
Ferro-Luzzi, A. 227-231  
Filitti, V. 613-618  
Fine, D.R. 349-355  
Finkielman, S. 437-442  
Finocchiaro, L.M.E. 437-442  
Firth, J.D. 67-71, 221-226, 559-574, 591-598  
Fish, P.J. 215-220  
Fisher, R.M. 339-348  
Fouke, J.M. 307-313  
Fraser, W.D. 161-165  
Frayn, K.N. 339-348, 605-611  
Frediani, M. 443-450  
Freeman, D.J. 575-581  
Fulcher, G.R. 167-174  
Fürst, P. 331-337
- Gaffney, D. 575-581  
Gallen, I.W. 279-285  
Gambaro, G. 113-116  
Garberi, A. 647-656  
Gardiner, S.M. 393-401  
Gelfand, R.A. 457-466  
Ghatei, M.A. 619-623  
Ghiggeri, G.M. 647-656  
Gibbons, G.F. 339-348  
Ginevri, F. 647-656  
Girolami, J.-P. 29-35  
Goldsmith, D.J.A. 357-364  
Goldstein, A.J. 233-238  
Gómez-Garre, D. 551-558  
Gonick, H.C. 185-192  
Goode, H.F. 247-252  
Goss, D.E. 215-220  
Gove, C. 67-71  
Granström, E.F. 639-645  
Grant, P.J. 513-516  
Green, J.R.B. 663-668  
Griffin, S.A. 523-530  
Grimble, R.F. 657-662  
Grimm, G. 477-482  
Grover, P.K. 9-15

- Guillou, P.J. 247-252  
 Gusmano, R. 647-656
- Haines, D.J. 663-668  
 Hall, R.I. 247-252  
 Halls, J. 215-220  
 Harmeyer, J. 409-414  
 Hartley, G. 517-522  
 Hauser, A.-C. 471-476  
 Haylor, J. 381-386  
 Heath, D.F. 201-213  
 Hensen, J. 429-435  
 Heseltine, D. 517-522  
 Hilton, P.J. 357-364  
 Hjelte, L. 299-305  
 Holmes, R. 175-183  
 Hulks, G. 51-55  
 Humphreys, S.M. 339-348  
 Hunter, J.O. 425-427
- Imholz, B.P.M. 73-79  
 Ireland, S.B. 537-542
- Jackson, A.A. 253-258  
 Jadine, A.G. 51-55  
 Jamal, Y.S. 139-147  
 James, G. 371-376  
 James, M.A. 499-504  
 James, O.F.W. 517-522  
 Janata, O. 471-476  
 Jenkins, D. 669-670  
 Jenkins, M.V. 233-238  
 Johns, E.J. 43-50  
 Jones, J.V. 499-504  
 Jones, P.W. 17-21  
 Jorfeldt, L. 81-87
- Kador, P. 599-603  
 Karemaker, J.M. 73-79  
 Katakity, M. 233-238  
 Kaune, R. 409-414  
 Kelleher, J. 247-252  
 Kelly, S.M. 425-427  
 Kelsey, C.R. 233-238  
 Kemp, G.J. 491-497  
 Khalil-Manesh, F. 185-192  
 Khoja, S.M. 483-490  
 Knox, A.J. 315-323, 325-330  
 Kruithof, E.K.O. 513-516  
 Kurz, R.W. 477-482
- Lagarde, M. 467-470  
 Lam, H.-C. 619-623  
 Lanne, B. 639-645  
 Laragh, J.H. 371-376  
 Larsson, M. 299-305  
 Le Quan, Sang, K.H. 613-618  
 Leclercq, C. 227-231  
 Ledingham, J.G.G. 1-3, 67-71,  
 491-497, 559-574, 583-589
- Lee, M.R. 377-380  
 Leenen, F.H.H. 155-159  
 Levenson, J. 613-618  
 Lever, M.J. 215-220  
 Lightman, Stan 599-603  
 Lightman, Susan 599-603  
 Linde, B. 131-138  
 Lloyd, J.V. 37-42  
 Lobley, R.W. 175-183  
 Louard, R.J. 457-466  
 Loveridge, N. 233-238  
 López-Farré, A. 551-558  
 López-Novoa, J.M. 551-558  
 Lyall, F. 523-530
- Macdonald, I.A. 279-285, 517-522  
 MacGregor, G.A. 5-8  
 MacLaughlin, M. 23-27  
 MacNee, W. 97-107  
 Macovschi, O. 467-470  
 Macphail, S. 625-630, 631-638  
 MacPherson, F. 523-530  
 Maleki-Yazdi, M.R. 155-159  
 Malmborg, A.-S. 299-305  
 Marchetti, J. 29-35  
 Marchini, F. 113-116  
 Marriott, I. 43-50  
 Marshall, J.M. 43-50  
 Marshall, V.R. 9-15  
 Marzaro, G. 113-116  
 Matthews, D.M. 267-272  
 Maycock, P.F. 605-611  
 McDonough, M.J. 339-348  
 McFadden, E.R., Jr 307-313  
 McNally, P.G. 259-266  
 Mello Aires, M. 23-27  
 Meskini, N. 467-470  
 Millar, J.G.B. 117-121  
 Mistry, N. 259-266  
 Moran, B.J. 253-258  
 Morris, J. 357-364  
 Morton, J.J. 523-530  
 Mosca, F. 443-450  
 Mott, V. 625-630  
 Müller, A. 149-154  
 Muller, A.F. 393-401
- Nahmod, V.E. 437-442  
 Nemoz, G. 467-470  
 Newsholme, E.A. 483-490  
 Ng, L.L. 491-497  
 Nicholls, D.P. 89-95  
 Northfield, T.C. 349-355
- Oelkers, W. 57-65  
 Oleggini, M. 443-450  
 Oleggini, R. 647-656  
 Orskov, H. 167-174
- Packard, C.J. 575-581  
 Panos, M.Z. 67-71  
 Parker, K.H. 215-220  
 Pasque, C.B. 123-129  
 Pecker, M. 371-376  
 Pecori, N. 443-450  
 Perez-Rodrigo, P. 551-558  
 Persson, L. 639-645  
 Petersen, J.S. 109-112  
 Petersson, A.-S. 639-645  
 Petranyi, G. 167-174  
 Pirola, C.J. 437-442  
 Pithois-Merli, I. 613-618  
 Poston, L. 273-278, 357-364  
 Potter, J.F. 517-522  
 Potts, J.L. 339-348  
 Praddaude, F. 29-35  
 Prigent, A.F. 467-470
- Quirk, F.H. 17-21
- Radda, G.K. 1-3, 491-497,  
 583-589  
 Raine, A.E.G. 67-71, 221-226  
 Rajagopalan, B. 1-3, 583-589  
 Ramon y Cajal, S. 551-558  
 Ranaldi, L. 227-231  
 Ratcliffe, P.J. 491-497  
 Rebuck, A.S. 155-159  
 Regan, C.J. 605-611  
 Reinhart, W.H. 387-391  
 Riley, M. 89-95  
 Roberts, A.F.C. 221-226  
 Rodriguez, M. 123-129  
 Rodríguez-Sánchez, M.N. 451-456  
 Rohner, F. 387-391  
 Rose, G.A. 233-238  
 Russo, D. 523-530  
 Rutberg, H. 81-87  
 Rutherford, P.A. 365-369  
 Ryall, R.L. 9-15
- Saphier, P.W. 233-238  
 Scheucher, A. 437-442  
 Schrier, R.W. 429-435  
 Schröder, B. 409-414  
 Schwietzer, G. 57-65  
 Sealey, J.E. 371-376  
 Selby, C. 97-107  
 Sertl, K. 477-482  
 Shalmi, M. 109-112  
 Sharif, H. 583-589  
 Shenkin, A. 161-165  
 Shepherd, J. 575-581  
 Siebert, D.M. 37-42  
 Silva, A. 619-623  
 Simon, A. 613-618  
 Sleight, P. 583-589  
 Smaje, L.H. 5-8

- Sollevi, A. 131-138  
Somogyi, A.A. 37-42  
Stamp, T.C.B. 233-238  
Stanford, C.F. 89-95  
Stewart, P.M. 537-542  
Stockenhuber, F. 471-476, 477-482  
Strandvik, B. 299-305  
Strazzullo, P. 531-536  
Swan, C.H.J. 663-668  
Symonds, E.M. 403-408
- Takahashi, K. 619-623  
Tattersfield, A.E. 315-323, 325-330  
Taylor, D.J. 491-497  
Thiede, H.M. 57-65  
Thomas, T.H. 365-369, 625-630,  
631-638  
Thomsen, K. 109-112
- Thomson, N.C. 51-55  
Tooke, J.E. 5-8  
Toti, E. 227-231  
Tran-Van, T. 29-35  
Tuchelt, H. 57-65
- Van Damme, J. 161-165  
Villamil, M.F. 149-154  
Vinnars, E. 331-337
- Walker, B.E. 247-252  
Walker, M. 167-174  
Waller, D.G. 117-121  
Walls, J. 259-266  
Warwick, R. 175-183  
Wasserman, S.M. 5-8  
Watson, M. 357-364
- Weiler, E. 185-192  
Wennmalm, Å. 639-645  
Westaby, D. 67-71  
Wieling, W. 73-79  
Wilkinson, R. 365-369, 625-630,  
631-638  
Williams, H.E. 113-116  
Williams, R. 67-71  
Williams, S.A. 5-8  
Wilson, K.M. 37-42  
Winell, S. 639-645  
Wolin, A.D. 307-313  
Woodley, J.F. 663-668  
Woolfson, R.G. 273-278
- Zammit, V.C. 505-511  
Zentler-Munro, P.L. 349-355

# Volume 79

## 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.

- Acetylcholine  
  endothelium-dependent relaxation, resistance  
    arteries 273-278
- Acute metabolic acidosis  
  lithium 23-27
- Acute renal failure  
  platelet-activating factor, glycerol 551-558
- Acute-phase protein response  
  interleukin-6 161-165
- Adenosine  
  cardiac output, regional circulation 131-138
- Adipose tissue  
  postprandial substrate deposition 339-348
- Adrenaline  
  oxygen 155-159
- Adriamycin nephrosis  
  dietary protein restriction, xanthine  
    oxidase 647-656
- Affinity constant  
  sodium pump, erythrocytes 625-630
- Ageing  
  blood mononuclear cells, cyclic  
    phosphodiesterase 467-470  
  orthostatic hypotension, postural changes 73-79
- Airway smooth muscle contractility  
  sodium-transport inhibitors 315-323
- Aldose reductase  
  lens, diabetes 599-603
- Aldosterone  
  angiotensin II, atrial natriuretic factor 57-65
- Alkaline phosphatase  
  zinc, gastrointestinal neoplasms 247-252
- Amiloride  
  airway smooth muscle contractility 315-323  
  bronchial reactivity, histamine 325-330
- Amino acid kinetics  
  skeletal muscle, branched-chain amino  
    acids 457-466
- Amino acids  
  muscle, glucocorticoids 139-147  
  muscle and plasma, dietary protein 331-337  
  renal function, isolated kidney 381-386
- Amiodarone  
  erythrocyte membrane 387-391
- Angiotensin II  
  aldosterone, atrial natriuretic factor 57-65  
  hypertrophy, hypertension 523-530  
  pregnancy-induced hypertension 505-511  
  sodium handling, nephrotic syndrome 559-574
- Angiotensin II binding  
  platelets, pregnancy 403-408
- Angiotensin-converting enzyme inhibitors  
  kidney, kininases 29-35  
  regional haemodynamics 393-401
- L-Arabinose excretion  
  intestinal permeability, lactase deficiency 175-183
- L-Arginine  
  endothelium-derived relaxing factor, cyclosporin A  
    derivatives 149-154  
  renal function, isolated kidney 381-386
- Arterial blood flow pattern  
  atherosclerosis, isosorbide dinitrate 215-220
- Aspirin infusion  
  platelet aggregation, thromboxane 37-42
- Asthma  
  blood flow, cold challenge 307-313  
  distress, quality of life 17-21
- Atherosclerosis  
  arterial blood flow pattern, isosorbide  
    dinitrate 215-220
- Atrial natriuretic peptide  
  bronchomotor tone 51-55  
  cardiac tamponade 377-380  
  renin-angiotensin system, sodium depletion 57-65  
  sodium excretion, diurnal variation 371-376  
  sodium handling, nephrotic syndrome 559-574  
  sodium retention, cirrhosis 67-71
- Atrial stretch  
  atrial natriuretic peptide 377-380
- Autologous serum  
  sodium-proton exchange, leucocytes 357-364
- Autonomic function  
  postprandial blood pressure 517-522
- Bias  
  primed infusion, Steele equation 201-213
- Biocompatibility  
  membrane attack complex, haemodialysis 471-476
- Blood flow  
  cold challenge, asthma 307-313  
  skeletal muscle, chronic renal failure 239-245
- Blood gases  
  catheterization, femoral vessels 81-87
- Blood mononuclear cells  
  cyclic phosphodiesterase, ageing 467-470
- Blood pressure  
  calcium regulation, cell membrane  
    abnormalities 415-423\*

- Cushing reflex 543–550\*
  - hypertrophy, renin–angiotensin system 523–530
  - ventricular arrhythmia, working heart model 499–504
- Blood pressure determination
  - postural changes, ageing 73–79
- Blood-pressure micropuncture
  - capillary, hypertension 5–8
- Brain
  - somatostatin receptors, ethanol 451–456
- Branched-chain amino acids
  - proteolysis, skeletal muscle 457–466
- Bronchial reactivity
  - histamine, sodium-transport inhibitors 325–330
- Bronchomotor tone
  - atrial natriuretic peptide 51–55
- Calcitriol receptor
  - pseudo-vitamin D deficiency rickets type I 409–414
- Calcium
  - platelets, shear stress, hypertension 613–618
- Calcium oxalate crystallization
  - urate 9–15
- Calcium regulation
  - cell membrane abnormalities, hypertension 415–423\*
- Calcium-channel blockers
  - renal haemodynamics, cyclosporin A 259–266
- Calcium-entry blocker
  - isolated perfused heart, endothelin 221–226
- Capillary
  - blood-pressure micropuncture, hypertension 5–8
- Captopril
  - regional haemodynamics 393–401
  - sodium excretion, nephrotic syndrome 123–129
- Cardiac output
  - adenosine 131–138
  - endothelin, calcium-entry blocker 221–226
- Cardiac tamponade
  - atrial natriuretic peptide 377–380
- Cardiovascular system
  - eicosanoids, inheritance and environmental factors 639–645
- Catecholamines
  - adenosine 131–138
  - dopamine infusion 605–611
  - hypoglycaemia, glucose-clamp technique 279–285
  - oxygen 155–159
  - postprandial blood pressure 517–522
- Catheterization
  - leg blood flow, substrate exchange 81–87
- Cholesterol
  - erythrocyte membrane, amiodarone 387–391
- Cholesteryl ester transfer protein
  - restriction fragment length polymorphism, high-density lipoprotein cholesterol 575–581
- Chromatography
  - endothelin, Gram-negative bacteraemia 619–623
- Chronic heart failure
  - skeletal muscle, metabolism 583–589
  - substrate utilization, exercise 89–95
- Chronic renal failure
  - blood flow, skeletal muscle 239–245
  - pruritus, histamine 477–482
- Chylomicrons
  - forearm muscle, adipose tissue 339–348
- Chyme
  - lipolysis, enzyme inhibitors 349–355
- Cirrhosis
  - sodium retention, atrial natriuretic peptide 67–71
- Coeliac disease
  - excretion of raffinose, lactose and L-arabinose 175–183
- Cold challenge
  - blood flow, asthma 307–313
- Colonic permeability
  - urea 253–258
- Colostomy
  - urea metabolism and hydrolysis 253–258
- Complement
  - haemodialysis 471–476
- Congestive heart failure
  - noradrenaline 429–435
- Coronary vasoconstriction
  - endothelin, calcium-entry blocker 221–226
- C-reactive protein
  - surgery, interleukin-6 161–165
- Cremophor
  - endothelium-derived relaxing factor 149–154
- Crohn's disease
  - excretion of raffinose, lactose and L-arabinose 175–183
- Cushing reflex
  - a reappraisal 543–550\*
- Cyclic phosphodiesterase
  - blood mononuclear cells, ageing 467–470
- Cyclosporin A
  - renal haemodynamics, nifedipine 259–266
  - vehicles, endothelium-derived relaxing factor 149–154
- Cystic fibrosis
  - essential fatty acid deficiency, renal function 299–305
- Defence response
  - emotional stress, skin blood flow 43–50
- Defunctioned colon
  - urea metabolism and hydrolysis 253–258
- Desamino-D-arginine-vasopressin
  - kallikrein, urine 117–121
- Diabetes
  - aldose reductase, lens 599–603
  - primed infusion, glucose 201–213
- Dietary fat
  - prostaglandin E<sub>2</sub>, tumour necrosis factor- $\alpha$  657–662
- Dietary protein
  - adriamycin nephrosis, xanthine oxidase 647–656
  - muscle and plasma amino acids 331–337
- Digestion
  - fatty acids, enzyme inhibitors 349–355
- Digoxin
  - bronchial reactivity, histamine 325–330



- 1,25-Dihydroxyvitamin D<sub>3</sub>  
 pseudo-vitamin D deficiency rickets type I 409–414
- Discretionary salt intake  
 lithium-marker technique, population studies 227–231
- Distress  
 asthma, quality of life 17–21
- Diuretics  
 sodium handling, nephrotic syndrome 559–574
- Diurnal variation  
 sodium excretion, atrial natriuretic peptide 371–376
- Dopamine infusion  
 metabolic effects 605–611
- Dye dilution  
 leg blood flow 81–87
- Emotional stress  
 skin blood flow, laser Doppler flowmetry 43–50
- Enalaprilat  
 regional haemodynamics 393–401
- Endogenous sodium–potassium adenosine triphosphatase inhibitor  
 enzyme kinetics 185–192
- Endothelin  
 Gram-negative bacteraemia, tumour necrosis factor- $\alpha$  619–623  
 isolated perfused heart 221–226  
 sodium handling, nephrotic syndrome 559–574
- Endothelium-dependent relaxation  
 resistance arteries, *N<sup>G</sup>*-monomethyl-L-arginine 273–278
- Endothelium-derived relaxing factor  
 cyclosporin A vehicles 149–154
- Endotoxin  
 endothelin, tumour necrosis factor- $\alpha$  619–623  
 prostaglandin E<sub>2</sub>, dietary fats 657–662
- Energy expenditure  
 surgical stress, insulin resistance 443–450
- Environmental factors  
 prostacyclin, platelet activity 639–645
- Enzyme kinetics  
 lead, endogenous sodium–potassium adenosine triphosphatase inhibitor 185–192
- Enzymes  
 intestinal mucosa, uraemia 663–668
- Epidermal growth factor  
 mucus, gastric mucosa 425–427
- Erythrocyte membrane  
 cholesterol, amiodarone 387–391
- Erythrocytes  
 deformability, amiodarone 387–391  
 sodium–lithium countertransport, sodium affinity 365–369  
 sodium pump 625–630  
 sodium pump, pregnancy 631–638
- Escherichia coli*  
 endothelin, tumour necrosis factor- $\alpha$  619–623
- Essential fatty acid deficiency  
 cystic fibrosis, renal function 299–305
- Essential hypertension  
 kidney, salt intake 193–200\*, 289–297\*  
 sodium–lithium countertransport, sodium affinity 365–369
- Ethanol  
 brain, somatostatin receptors 451–456
- Exercise  
 skeletal muscle, chronic heart failure 583–589  
 sodium–proton antiport, hypertension 491–497  
 substrate utilization, chronic heart failure 89–95
- Fats  
 prostaglandin E<sub>2</sub>, tumour necrosis factor- $\alpha$  657–662
- Fatty acid production  
 lipase, enzyme inhibitors 349–355
- Femoral artery  
 catheterization, substrate exchange 81–87
- Femoral vein  
 catheterization, substrate exchange 81–87
- Fluoride  
 osteoporosis, parathyroid hormone 233–238
- Forearm metabolism  
 insulin sensitivity, non-esterified fatty acids 167–174
- Forearm muscle  
 postprandial substrate deposition 339–348
- Free fatty acids  
 catheterization, femoral vessels 81–87  
 forearm muscle, adipose tissue 339–348  
 substrate utilization, chronic heart failure 89–95
- Frontoparietal cortex  
 somatostatin receptors, ethanol 451–456
- Functioning colon  
 urea metabolism and hydrolysis 253–258
- Galactosaemia  
 aldose reductase, lens 599–603
- Gastric mucosa  
 mucus, epidermal growth factor 425–427
- Gastrointestinal neoplasms  
 leucocyte and muscle zinc, alkaline phosphatase 247–252
- Glomerular filtration rate  
 essential fatty acid deficiency, cystic fibrosis 299–305  
 isolated kidney, amino acids 381–386  
 platelet-activating factor, acute renal failure 551–558
- Glomeruli  
 platelet-activating factor, acute renal failure 551–558
- Glomerulotubular balance  
 sodium excretion, nephrotic syndrome 123–129
- Glucocorticoids  
 glutamine metabolism, muscle 139–147
- Gluconeogenesis  
 kidney, sepsis 483–490
- Glucose  
 catheterization, femoral vessels 81–87  
 dopamine infusion 605–611  
 forearm muscle, adipose tissue 339–348  
 plasminogen activator inhibitor-1 513–516  
 primed infusion, bias 201–213

- Glucose clamp  
 thermogenesis, catecholamines 279–285  
 surgical stress, insulin resistance 443–450
- Glucose–fatty acid cycle  
 non-insulin-dependent diabetes mellitus 167–174
- L-Glutamic acid  
 renal function, isolated kidney 381–386
- Glutaminase  
 muscle, glucocorticoids 139–147
- Glutamine metabolism  
 muscle, glucocorticoids 139–147
- Glutamine synthetase  
 muscle, glucocorticoids 139–147
- Glycerol  
 acute renal failure, platelet-activating factor 551–558  
 adenosine 131–138  
 catheterization, femoral vessels 81–87  
 substrate utilization, chronic heart failure 89–95
- Glycine  
 renal function, isolated kidney 381–386
- Glycosaminoglycans  
 oxalate, nephrolithiasis 113–116
- G-proteins  
 blood mononuclear cells, ageing 467–470
- Gram-negative bacteraemia  
 endothelin, tumour necrosis factor- $\alpha$  619–623
- Guanosine 3':5'-cyclic monophosphate  
 diurnal variation, atrial natriuretic peptide 371–376
- Haemodialysis  
 membrane attack complex, biocompatibility 471–476  
 uraemic pruritus, histamine 477–482
- 5-(*N,N*-Hexamethylene) amiloride  
 sodium–proton exchange, leucocytes 357–364
- High-density lipoprotein cholesterol  
 restriction fragment length polymorphism, cholesteryl ester transfer protein 575–581
- Hippocampus  
 somatostatin receptors, ethanol 451–456
- Histamine  
 bronchial reactivity, sodium-transport inhibitors 325–330  
 uraemic pruritus, haemodialysis 477–482
- Human brain *in vivo*  
 intracellular pH, hypercapnia 1–3
- 5-Hydroxytryptamine  
 pineal gland, hypertension 437–442
- Hypercapnia  
 human brain *in vivo*, intracellular pH 1–3
- Hypertension  
 angiotensin-converting enzyme inhibitors, kidney 29–35  
 calcium regulation, cell membrane abnormalities 415–423\*  
 capillary, blood-pressure micropuncture 5–8  
 Cushing reflex 543–550\*  
 hypertrophy, renin–angiotensin system 523–530  
 kidney, salt intake 193–200\*, 289–297\*
- pineal gland, muscarinic activity 437–442  
 platelet cytosolic free calcium concentration, shear stress 613–618  
 sodium–lithium countertransport, sodium affinity 365–369  
 sodium–proton antiport, skeletal muscle 491–497
- Hypertrophy  
 hypertension, renin–angiotensin system 523–530
- Hyperuricosuria  
 calcium oxalate crystallization 9–15
- Hypocalcaemia  
 calcitriol receptor, pseudo-vitamin D deficiency rickets type I 409–414
- Hypoglycaemia  
 thermogenesis, catecholamines 279–285
- Ibuprofen  
 sodium excretion, nephrotic syndrome 123–129
- Idiopathic nephrotic syndrome  
 susceptibility determinants, linkage disequilibrium 669–670
- In situ* hybridization  
 aldose reductase, lens 599–603
- Inheritance  
 prostacyclin, platelet activity 639–645
- Inhibition of metabolism  
 sodium handling, nephrotic syndrome 559–574
- Insulin  
 forearm muscle, adipose tissue 339–348  
 plasminogen activator inhibitor-1 513–516  
 postprandial blood pressure 517–522
- Insulin resistance  
 surgical stress, glucose clamp 443–450
- Insulin sensitivity  
 forearm metabolism, non-esterified fatty acids 167–174
- Interleukin-6  
 surgery, C-reactive protein 161–165
- Intestinal mucosa  
 enzymes, uraemia 663–668
- Intestinal permeability  
 excretion of raffinose, lactose and L-arabinose 175–183
- Intracellular pH  
 human brain *in vivo*, hypercapnia 1–3  
 leucocytes, autologous serum 357–364
- Isolated perfused heart  
 endothelin, calcium-entry blocker 221–226
- Isolated perfused kidney  
 nephrotic syndrome, polycations 591–598  
 sodium handling, nephrotic syndrome 559–574
- Isosorbide dinitrate  
 arterial blood flow pattern, atherosclerosis 215–220
- Jejunum  
 peptides, kinetics of influx 267–272
- Kallikrein  
 urine, desamino-D-arginine-vasopressin 117–121

- Kallikrein-kinin system**  
 angiotensin-converting enzyme inhibitors,  
 kidney 29-35
- Kidney**  
 angiotensin-converting enzyme inhibitors,  
 kininases 29-35  
 essential hypertension, salt intake 193-200\*,  
 289-297\*  
 regulation of gluconeogenesis, sepsis 483-490
- Kidney failure**  
 small intestine, enzymes 663-668
- Kidney function**  
 amino acids 381-386
- Kidney perfusion**  
 sodium retention, atrial natriuretic peptide 67-71
- Kinetics**  
 neutrophils, lungs 97-107\*  
 peptides, jejunum 267-272  
 renal tubular acidification, lithium 23-27  
 sodium-proton antiporter, lymphocytes 531-536
- Kininases**  
 kidney, angiotensin converting enzyme  
 inhibitors 29-35
- Labrafil**  
 endothelium-derived relaxing factor 149-154
- Lactase deficiency**  
 excretion of raffinose, lactose and  
 L-arabinose 175-183
- Lactate**  
 catheterization, femoral vessels 81-87
- Lactose excretion**  
 intestinal permeability, lactase deficiency 175-183
- Laser Doppler flowmetry**  
 skin blood flow, emotional stress 43-50
- Lead**  
 enzyme kinetics 185-192
- Leg blood flow**  
 dye dilution, strain-gauge plethysmography 81-87
- Lens**  
 aldose reductase, diabetes 599-603
- Leucine**  
 renal function, isolated kidney  
 skeletal muscle, branched-chain amino  
 acids 457-466
- Leucocytes**  
 sodium-proton antiport, hypertension 491-497  
 sodium-proton exchange, autologous  
 serum 357-364  
 zinc, gastrointestinal neoplasms 247-252
- Linkage disequilibrium**  
 idiopathic nephrotic syndrome, susceptibility  
 determinants 669-670
- Lipase**  
 fatty acids, enzyme inhibitors 349-355
- Lipolysis**  
 dopamine infusion 605-611  
 enzyme inhibitors, chyme 349-355
- Lipopolysaccharide**  
 endothelin, tumour necrosis factor- $\alpha$  619-623
- Lisinopril**  
 regional haemodynamics 393-401
- Lithium**  
 renal tubular acidification, kinetics 23-27  
 urinary excretion, discretionary salt intake 227-231
- Lithium reabsorption**  
 sodium restriction, water loading 109-112
- Lung**  
 neutrophil kinetics 97-107\*
- Lymphocytes**  
 sodium-proton antiporter, kinetics 531-536
- Magnesium**  
 ventricular arrhythmia, blood pressure 499-504
- Maximal enzyme activities**  
 renal gluconeogenesis, sepsis 483-490
- Maximum velocity**  
 sodium pump, erythrocytes 625-630
- Melatonin**  
 pineal gland, hypertension 437-442
- Membrane abnormalities**  
 calcium regulation, hypertension 415-423\*
- Membrane attack complex**  
 biocompatibility, haemodialysis 471-476
- Metabolism**  
 skeletal muscle, chronic heart failure 583-589
- Microcirculation**  
 hypertension 5-8
- N-Monomethyl-L-arginine**  
 endothelium-dependent relaxation, resistance  
 arteries 273-278
- Mucus**  
 gastric mucosa, epidermal growth factor 425-427
- Muscarinic activity**  
 pineal gland, hypertension 437-442
- Muscle**  
 amino acids, dietary protein 331-337  
 blood flow, chronic renal failure 239-245  
 glutamine metabolism, glucocorticoids 139-147  
 zinc, gastrointestinal neoplasms 247-252
- Myocardial wall stress**  
 ventricular arrhythmia, working heart  
 model 499-504
- Nephrolithiasis**  
 oxalate, glycosaminoglycans 113-116
- Nephrotic syndrome**  
 glomerulotubular balance, sodium  
 excretion 123-129  
 polycations, isolated perfused kidney 591-598  
 sodium handling, isolated perfused kidney 559-574
- Neutrophils**  
 kinetics, lung 97-107\*
- Nicardipine**  
 isolated perfused heart, endothelin 221-226
- Nifedipine**  
 renal haemodynamics, cyclosporin A 259-266
- Nitrogen**  
 urea hydrolysis, functioning and defunctioned  
 colon 253-258

- Non-esterified fatty acids  
  forearm metabolism, insulin sensitivity 167–174
- Noradrenaline  
  congestive heart failure 429–435  
  oxygen 155–159  
  sodium handling, nephrotic syndrome 559–574  
  substrate utilization, chronic heart failure 89–95
- Nuclear magnetic resonance spectroscopy  
  intracellular pH, human brain *in vivo* 1–3  
  skeletal muscle, metabolism 583–589  
  sodium–proton antiport, skeletal muscle 491–497
- Orthostatic hypotension  
  postural changes, ageing 73–79
- Osteoporosis  
  parathyroid hormone, fluoride 233–238
- Ouabain  
  airway smooth muscle contractility 315–323
- Oxalate  
  glycosaminoglycans, nephrolithiasis 113–116
- Oxygen  
  catecholamines 155–159
- Oxygen consumption  
  dopamine infusion 605–611
- Parathyroid hormone  
  osteoporosis, fluoride 233–238
- Pearson product-moment correlation  
  limitations 287
- Peptide hydrolases  
  intestinal mucosa, uraemia 663–668
- Peptides  
  kinetics of influx, jejunum 267–272
- Pharmacokinetics  
  tobramycin, essential fatty acid deficiency 299–305
- Pineal gland  
  muscarinic activity, hypertension 437–442
- Plasma  
  amino acids, dietary protein 331–337
- Plasminogen activator inhibitor-1  
  insulin, triacylglycerol 513–516
- Platelet activity  
  inheritance and environmental factors 639–645
- Platelet aggregation  
  aspirin infusions, thromboxane 37–42
- Platelet membrane glycoproteins  
  angiotensin II, pregnancy 403–408
- Platelet-activation factor  
  acute renal failure, glycerol 551–558
- Platelets  
  cytosolic free calcium concentration, shear stress 613–618
- Polycations  
  isolated perfused kidney, nephrotic syndrome 591–598
- Poly-L-lysine  
  isolated perfused kidney, nephrotic syndrome 591–598
- Polyoxyethylated derivatives  
  endothelium-derived relaxing factor 149–154
- Postprandial blood pressure  
  autonomic function, insulin 517–522
- Posture  
  orthostatic hypotension, ageing 73–79  
  sodium excretion, atrial natriuretic peptide 371–376
- Potassium  
  ventricular arrhythmia, blood pressure 499–504
- Potassium-activated *p*-nitrophenylphosphatase  
  lead, endogenous sodium–potassium adenosine triphosphatase inhibitor 185–192
- Pregnancy  
  platelet angiotensin II binding, renin–angiotensin system 403–408  
  sodium pump, erythrocytes 631–638
- Pregnancy-induced hypertension  
  renin 505–511
- Primed infusion  
  glucose, bias 201–213
- Prostacyclin  
  inheritance and environmental factors 639–645
- Prostaglandin E<sub>2</sub>  
  tumour necrosis factor- $\alpha$ , dietary fats 657–662
- Protamine  
  isolated perfused rat kidney, nephrotic syndrome 591–598
- Protein degradation  
  uraemia 537–542
- Protein intake  
  muscle and plasma amino acids 331–337
- Protein synthesis  
  uraemia 537–542
- Proteinuria  
  dietary protein restriction, xanthine oxidase 647–656
- Proteolysis  
  skeletal muscle, branched-chain amino acids 457–466
- Protons  
  skeletal muscle, hypertension 491–497
- Pruritus  
  histamine, haemodialysis 477–482
- Pseudo-vitamin D deficiency rickets type I  
  calcitriol receptor 409–414
- Purine nucleoside phosphorylase  
  dietary protein restriction, adriamycin nephrosis 647–656
- Puromycin aminonucleoside  
  sodium handling, isolated perfused rat kidney 559–574
- Quality of life  
  asthma, distress 17–21
- Raffinose excretion  
  intestinal permeability, lactase deficiency 175–183
- Rate constant  
  sodium pump, erythrocytes 625–630
- Regional haemodynamics  
  adenosine 131–138  
  angiotensin-converting enzyme inhibitors 393–401

- Renal blood flow
  - platelet-activating factor, acute renal failure 551–558
- Renal gluconeogenesis
  - maximal enzyme activities, sepsis 483–490
- Renal haemodynamics
  - nifedipine, cyclosporin A 259–266
  - sodium excretion, nephrotic syndrome 123–129
- Renal tubular acidification
  - kinetics, lithium 23–27
- Renal tubules
  - regulation of gluconeogenesis, sepsis 483–490
- Renin
  - hypertrophy, hypertension 523–530
  - pregnancy-induced hypertension 505–511
  - sodium excretion, atrial natriuretic peptide 371–376
- Renin-angiotensin system
  - atrial natriuretic peptide, sodium depletion 57–65
  - platelet angiotensin II binding, pregnancy 403–408
- Resistance arteries
  - endothelium-dependent relaxation  $N^G$ -mono-L-arginine 273–278
- Restriction fragment length polymorphism
  - cholesteryl ester transfer protein, high-density lipoprotein cholesterol 575–581
- Salt intake
  - essential hypertension, kidney 193–200\*, 289–297\*
- Sepsis
  - regulation of renal gluconeogenesis 483–490
- Shear rate
  - platelet cytosolic free calcium concentration, hypertension 613–618
- Shear stress
  - platelet cytosolic free calcium concentration, hypertension 613–618
- Skeletal muscle
  - blood flow, chronic renal failure 239–245
  - glutamine metabolism, glucocorticoids 139–147
  - metabolism, chronic heart failure 583–589
  - proteolysis, branched-chain amino acids 457–466
  - sodium-proton antiport, hypertension 491–497
- Skin blood flow
  - emotional stress, laser Doppler flowmetry 43–50
- Small intestine
  - enzymes, uraemia 663–668
- Sodium
  - skeletal muscle, hypertension 491–497
- Sodium affinity
  - sodium-lithium countertransport, essential hypertension 365–369
- Sodium depletion
  - renin-angiotensin system, atrial natriuretic peptide 57–65
- Sodium excretion
  - diurnal variation, atrial natriuretic peptide 371–376
  - glomerulotubular balance, nephrotic syndrome 123–129
- Sodium handling
  - nephrotic syndrome, isolated perfused kidney 559–574
- Sodium intake
  - lithium-marker technique, population studies 227–231
- Sodium-lithium countertransport
  - sodium affinity, essential hypertension 365–369
- Sodium-potassium-activated adenosine triphosphatase
  - lead, endogenous sodium-potassium adenosine triphosphatase inhibitor 185–192
- Sodium-proton antiporter
  - kinetics, lymphocyte 531–536
  - leucocytes, autologous serum 357–364
  - skeletal muscle, hypertension 491–497
- Sodium pump
  - affinity constant, maximum velocity, rate constant 625–630, 631–638
- Sodium resorption
  - lithium, renal tubular acidification 23–27
- Sodium restriction
  - tubular lithium reabsorption, water loading 109–112
- Sodium retention
  - cirrhosis, atrial natriuretic peptide 67–71
- Sodium-transport inhibitors
  - airway smooth muscle contractility 315–323
- Somatostatin receptors
  - brain, ethanol 451–456
- Specific airway conductance
  - atrial natriuretic peptide 51–55
- Steele equation
  - primed infusion, bias 201–213
- Strain-gauge plethysmography
  - leg blood flow 81–87
- Stress
  - skin blood flow, laser Doppler flowmetry 43–50
- Substrate oxidation
  - non-esterified fatty acids 167–174
- Substrate utilization
  - exercise, chronic heart failure 89–95
- Surgery
  - insulin resistance, glucose clamp 443–450
  - interleukin-6, C-reactive protein 161–165
  - leucocyte and muscle zinc, alkaline phosphatase 247–252
- Susceptibility determinants
  - idiopathic nephrotic syndrome, linkage disequilibrium 669–670
- Terminal complement complex
  - haemodialysis 471–476
- Thermal conductivity
  - cold challenge, asthma 307–313
- Thermogenesis
  - hypoglycaemia, glucose-clamp technique 279–285
- Thermoregulation
  - skin blood flow, laser Doppler flowmetry 43–50
- Thromboxane
  - inheritance and environmental factors 639–645
  - platelet aggregation, aspirin infusions 37–42
- Tobramycin
  - pharmacokinetics, essential fatty acid deficiency 299–305

- Triacylglycerol  
   forearm muscle, adipose tissue 339-348  
   plasminogen activator inhibitor-1 513-516  
 Tubular lithium reabsorption  
   sodium restriction, water loading 109-112  
 Tumour necrosis factor- $\alpha$   
   Gram-negative bacteraemia, endothelin 619-623  
   prostaglandin E<sub>2</sub>, dietary fats 657-662
- Uraemia  
   protein turnover 537-542  
   small intestine, enzymes 663-668  
 Uraemic pruritus  
   haemodialysis, histamine 477-482  
 Urate  
   calcium oxalate crystallization 9-15  
 Urea  
   essential fatty acid deficiency, cystic  
   fibrosis 299-305  
 Urea hydrolysis  
   functioning and defunctioned colon 253-258  
 Urea metabolism  
   functioning and defunctioned colon 253-258  
 Urinary excretion  
   lithium, discretionary salt intake 227-231  
 Urine  
   calcium oxalate crystallization, urate 9-15  
   kallikrein, desamino-D-arginine-  
   vasopressin 117-121
- Urolithiasis  
   hyperuricosuria 9-15
- Vascular conductance  
   angiotensin-converting enzyme inhibitors 393-401  
 Vascular reactivity  
   cold challenge, asthma 307-313  
 Vasodilatation  
   isolated kidney, amino acids 381-386  
 Vasopressin  
   kallikrein, urine 117-121  
 Ventricular arrhythmia  
   blood pressure, working heart model 499-504  
 Verapamil  
   isolated perfused heart, endothelin 221-226
- Water loading  
   tubular lithium reabsorption, sodium  
   restriction 109-112  
 Working heart model  
   ventricular arrhythmia, blood pressure 499-504
- Xanthine oxidase  
   dietary protein restriction, adriamycin  
   nephrosis 647-656
- Zinc  
   gastrointestinal neoplasms, surgery 247-252