

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

© The Medical Research Society and the Biochemical Society 1993  
ISSN 0143-5221

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

# ACKNOWLEDGMENTS

The Editorial Board of *Clinical Science* gratefully acknowledges the assistance given by the following referees during the year 1992.

- |                   |                   |                     |                    |                 |
|-------------------|-------------------|---------------------|--------------------|-----------------|
| Aalkjaer, C.      | Brown, E.A.       | Davie, M.           | Folkow, B.         | Hind, C.        |
| Adams, L.         | Bruun, N.E.       | Davies, G.J.        | Forsling, M.       | Hofbauer, K.G.  |
| Agabiti-Rosei, E. | Buck, A.C.        | Davies, I.          | Foster, C.         | Hoidal, J.      |
| Aggett, P.        | Bülow, J.         | Davies, M.          | Frantz, R.         | Holland, O.B.   |
| Akerboom, Th.     | Bunag, R.D.       | Davis, J.           | Fraser, A.G.       | Holloway, B.R.  |
| Alexander, G.J.M. | Bund, S.J.        | Day, P.             | Fraser, W.D.       | Holman, G.D.    |
| Allen, J.A.       | Burden, A.C.      | Deary, I.J.         | Fredholm, B.       | Holman, R.R.    |
| Amery, A.         | Burt, A.D.        | Démolis, P.         | Fredriksson, M.    | Hopkins, S.     |
| Amiel, S.A.       |                   | Derkx, F.           | Freeman, R.H.      | Horowitz, M.    |
| Anderson, J.      | Cairns, H.        | Devynck, M.A.       | Friberg, P.        | Hosking, D.     |
| Anderson, S.      | Calam, J.         | Dibona, G.F.        | Frier, B.M.        | Housmans, P.    |
| Aperia, A.        | Calver, A.        | Diplock, A.C.       | Frostell, C.       | Howard, P.      |
| Arakawa, K.       | Campbell, B.      | Dockeray, G.        |                    | Howdle, P.D.    |
| Aronson, J.K.     | Campbell, I.T.    | Dominiczak, A.      | Garay, R.          | Hughes, J.M.B.  |
| Arthur, M.        | Cappuccio, F.P.   | Dormandy, T.        | Gardiner, S.M.     | Hughes, W.      |
| Äström, H.        | Caprio, S.        | Duggan, M.B.        | Garland, H.        | Humphreys, M.H. |
| Atterhög, J.-H.   | Carey, R.M.       | Duthie, G.G.        | Genuth, S.M.       |                 |
| Authi, K.         | Carli, F.         |                     | Gibbons, G.F.      | Imai, M.        |
| Axon, A.          | Carlson, G.       | Eadington, D.       | Gibson, J.F.       | Imai, Y.        |
|                   | Caro, C.          | Eastwood, J.        | Gilmore, I.        | Ind, P.W.       |
| Ball, S.G.        | Carr, S.          | Edmunds, M.E.       | Gitomer, W.L.      |                 |
| Balment, R.J.     | Case, M.          | Edwards, R.H.T.     | Gleeson, D.        | Jack, C.        |
| Barnes, N.C.      | Catto, G.         | Edwards, S.         | Gold, W.           | Jackson, A.A.   |
| Bartfai, T.       | Chapman, R.       | Eggleton, P.        | Gould, B.J.        | Jaffe, A.       |
| Bartlett, K.      | Chatterjee, K.    | Elias, E.           | Grainger, S.L.     | Jakeman, P.     |
| Bascom, R.        | Cheeseman, K.H.   | Elliott, H.         | Grassi, G.         | Jardine, A.     |
| Bates, C.         | Christensen, N.J. | Ellory, J.C.        | Green, R.          | Jeevanandam, M. |
| Behan, P.O.       | Clague, J.E.      | Emery, P.           | Greenwood, S.L.    | Jenkins, D.A.S. |
| Benetos, A.       | Clark, P.M.S.     | Emmeluth, C.        | Grenfell, A.       | Jennings, I.    |
| Bennett, T.       | Clayton, R.N.     | Erik, L.            | Griffin, G.        | Jern, S.        |
| Benson, M.        | Clellan, J.       | Eschenbacher, W.    | Griffiths, R.D.    | Jogstrand, T.   |
| Bergman, R.       | Clement, D.L.     | Evans, T.W.         | Grimble, G.K.      | Johns, E.J.     |
| Bertolatus, J.    | Cobbe, S.M.       | Ewing, D.J.         | Grooteveld, M.     | Johnston, D.G.  |
| Betteridge, D.J.  | Cockcroft, A.     |                     | Gutteridge, J.M.C. | Jones, C.       |
| Bevan, J.         | Cockcroft, J.     | Fagard, R.          |                    | Jones, D.       |
| Beynon, R.J.      | Coker, S.         | Fairweather-Tait,   | Haigh, R.M.        | Jones, D.A.     |
| Bishop, M.        | Collins, K.       | S.J.                | Hales, N.          | Jones, P.       |
| Bjarnasson, I.    | Connell, J.M.C.   | Farthing, M.J.      | Hall, J.A.         | Joseph, S.K.    |
| Bloom, S.         | Conway, J.        | Fearon, K.C.        | Halliwel, B.       | Julius, S.      |
| Boam, D.          | Cooper, A.        | Feldt-Rasmussen, B. | Halls, D.J.        | Junor, B.J.R.   |
| Boarder, M.       | Coppack, S.W.     | Ferrannini, E.      | Hambridge, M.      |                 |
| Bolton, A.G.M.    | Cornelis, R.      | Ferrari, A.         | Hardy, K.J.        | Kaijser, L.     |
| Bowsher, D.       | Cowley, A.        | Firth, J.D.         | Harris, A.         | Kalsheker, N.   |
| Boyle, P.         | Cox, I.J.         | Fitzsimons, J.T.    | Harris, M.         | Karlsson, J.A.  |
| Braganza, J.M.    | Crocker, J.       | Fleck, A.           | Haslett, C.        | Kashgarian, M.  |
| Bramley, P.       | Crow, T.          | Fleming, L.W.       | Haynes, W.         | Kastrup, J.     |
| Brisac, A.M.      | Cruickshank, J.K. | Flockerzi, V.       | Hearse, D.         | Keiser, J.      |
| Brodde, O.-E.     | Cuche, J.-L.      | Floreani, A.        | Heller, S.R.       | Keller, N.      |
| Brosius, F.       | Cullen, M.        | Flores, N.A.        | Henderson, I.      | Kellett, G.L.   |
| Broughton Pipkin, |                   | Flower, R.J.        | Hester, R.L.       | Kelly, R.W.     |
| F.                | Davenport, A.P.   | Fogelman, I.        | Hilton, P.J.       | Kendal, M.J.    |

- Killen, P.  
 King, R.F.G.J.  
 Kingsnorth, A.  
 Knight, B.  
 Knox, A.  
 Kopp, J.  
 Kubo, S.  
 Kucich, U.  
 Kumar, S.  
 Kurokawa, K.L.  
 Kurtz, T.
- Landau, B.R.  
 Landgren, B.-M.  
 Lane, R.  
 Lang, R.E.  
 Lanyon, L.E.  
 Larsen, F.  
 Laszlo, G.  
 Lawrence, A.  
 Lean, M.  
 Leanage, R.  
 Leckie, B.  
 Lee, M.R.  
 Leese, H.J.  
 Lehmann-Horn, F.  
 Leighton, B.  
 Lemoine, N.  
 Levy, J.  
 Lewis, M.J.  
 Leyssac, P.P.  
 Liggett, P.  
 Linblad, E.L.  
 Lipkin, G.  
 Little, R.A.  
 Llewelyn, G.  
 Loews, M.  
 London, G.  
 Long, N.  
 Long, R.  
 Lote, C.J.  
 Lowe, G.D.O.  
 Lowry, R.P.  
 Luft, F.  
 Lyall, F.
- MacDonald, T.M.  
 MacIver, D.  
 Mackness, M.I.  
 MacLaren, D.P.M.  
 MacNee, W.  
 MacTier, R.A.  
 Manley, S.E.  
 Margulies, K.B.  
 Mark, A.L.  
 Marsh, D.  
 Marshall, J.  
 Martin, P.A.  
 Matalon, S.
- Mather, H.M.  
 Mathie, R.  
 Matthews, D.  
 Matthias, C.J.  
 Mayfield, R.  
 McGarry, J.D.  
 McInnes, G.  
 McMillan, M.A.  
 McMurray, J.  
 McNeil, S.  
 McPhail, D.  
 McVicar, A.  
 Melcher, A.  
 Messmer, K.  
 Metsäninne, K.  
 Mier, A.  
 Mikhailidis, D.P.  
 Milledge, J.S.  
 Miller, J.P.  
 Miller, W.  
 Millward, D.J.  
 Moffat, M.  
 Moncada, S.  
 Montastruc, J.L.  
 Moore, K.  
 Moore, P.K.  
 Moore, R.  
 Moosavi, S.  
 Morice, A.H.  
 Moritoki, H.  
 Morrell, N.W.  
 Morton, J.J.  
 Moses, A.  
 Muir, A.L.  
 Muller, F.  
 Murdoch, J.B.  
 Murphy, J.  
 Myant, N.B.  
 Myers, M.J.
- Nawata, H.  
 Neuberger, J.  
 Newham, D.  
 Newsholme, E.A.  
 Newstead, C.G.  
 Neyes, L.  
 Ng, L.L.  
 Nicklas, J.  
 Nilsson-Ehle, P.  
 Nisell, H.  
 Nogami, M.  
 Norman, R.I.  
 Norsk, P.  
 Nosadini, R.  
 Nunez, D.
- O'Brien, E.  
 Oh, V.  
 Ohanian, J.
- Ohanian, V.  
 O'Hare, P.  
 Ohisalo, J.J.  
 Ohlstein, E.  
 Oldham, A.A.  
 Olesen, S.-P.  
 Olgaard, K.  
 Oliveira, D.  
 Opgenorth, T.  
 Oren, R.  
 O'Riordan, J.L.H.  
 Östergren, J.  
 Ourenschaw, J.D.  
 Ouwehand, W.H.
- Pacini, G.  
 Packard, C.  
 Palatini, P.  
 Pannier, B.  
 Parati, G.  
 Parks, W.  
 Patsch, J.R.  
 Pedersen, E.-B.  
 Penny, L.  
 Percy-Robb, I.W.  
 Perrett, D.  
 Pessina, A.C.  
 Peters, J.  
 Peters, T.J.  
 Petty, T.  
 Pfeifer, M.A.  
 Plevin, R.  
 Polak, J.M.  
 Poole-Wilson, P.  
 Potter, J.F.  
 Pound, J.  
 Pride, N.B.  
 Pusey, C.D.
- Rabelink, T.J.  
 Radziuk, J.  
 Rahn, K.H.  
 Rajagopalan, B.  
 Ralston, S.  
 Rapp, J.P.  
 Raskin, P.  
 Raud, J.  
 Read, N.  
 Reckless, J.  
 Reed, J.W.  
 Rees, A.  
 Rees, P.J.  
 Reeve, J.  
 Rennie, M.J.  
 Rettig, R.  
 Rhodes, J.M.  
 Rice-Evans, C.  
 Richards, N.T.  
 Riley, P.A.
- Ritter, J.M.  
 Ritter, R.M.  
 Rizza, R.A.  
 Robinson, C.  
 Rodger, S.  
 Rothwell, N.J.  
 Round, J.M.  
 Rowland, M.  
 Royston, P.  
 Rubin, P.C.  
 Rubinstein, I.  
 Ruderman, N.B.  
 Rumsby, M.G.  
 Rutherford, O.M.  
 Ryder, R.E.J.
- Sagnella, G.  
 Saldanha, C.  
 Saltin, B.  
 Samani, N.  
 Sanders, P.W.  
 Sargeant, A.J.  
 Savill, J.  
 Schmouder, R.  
 Schorah, C.  
 Schroter, R.C.  
 Schuster, H.  
 Scicli, A.G.  
 Scrutton, M.C.  
 Seed, M.  
 Seijrsen, P.  
 Semple, P.F.  
 Semplicini, A.  
 Shalmi, M.  
 Shamoon, H.  
 Sharma, A.M.  
 Sharman, V.L.  
 Sharp, M.  
 Shaw, K.  
 Sheehan, J.  
 Shirley, D.G.  
 Shore, A.C.  
 Shoulders, C.  
 Sies, H.  
 Silverman, M.  
 Sima, A.A.F.  
 Simon, A.  
 Simon, G.  
 Singer, D.R.J.  
 Sinkin, R.  
 Skott, P.  
 Smith, G.  
 Smith, R.  
 So, A.K.  
 Soeldner, J.S.  
 Solomon, L.R.  
 Sonksen, P.H.  
 Spurway, N.  
 Stamp, T.C.B.
- Stephens, N.  
 Stern, M.P.  
 Stevenson, J.C.  
 Stewart, P.M.  
 Stokes, G.S.  
 Stradling, J.R.  
 Strazzulo, P.  
 Strong, P.  
 Struthers, A.D.  
 Sturk, A.  
 Sudlow, M.F.  
 Sueishi, K.  
 Swales, J.  
 Swaminathan, R.  
 Swirsky, D.
- Taddei, S.  
 Takayangi, I.  
 Talmud, P.  
 Tamborlane, W.  
 Taskinen, M.R.  
 Tattersfield, A.E.  
 Taylor, G.  
 Taylor, G.W.  
 Taylor, P.  
 Taylor, R.  
 Tetley, T.  
 Thomas, P.  
 Thomas, R.  
 Thomas, T.  
 Thompson, A.  
 Thompson, A.B.  
 Thompson, A.M.  
 Thompson, G.  
 Thuilliez, C.  
 Thurston, H.  
 Townley, R.G.  
 Tracey, K.  
 Tsai, H.H.  
 Tulip, J.  
 Turnbull, A.  
 Turner, D.  
 Turnham, D.
- Unwin, R.J.
- Vallance, P.  
 Van Berkel, T.J.C.  
 Vernon, R.G.  
 Viverti, G.C.  
 Volkel, N.
- Waeber, B.  
 Wagenmaker, A.  
 Walker, J.D.  
 Walker, M.  
 Wallace, A.M.  
 Walley, T.  
 Walls, J.  
 Walt, R.

Ward, J.	Webster, J.	Williams, B.	Woo, P.	Young, E.
Ward, P.S.	Weetman, A.P.	Williams, G.	Woodhead, J.S.	Young, I.
Warren, J.	Weidmann, P.	Williams, G.R.	Woolfson, R.	Young, J.B.
Watanabe, T.	Werner, S.	Williamson, D.H.	Wooton, S.	Young, R.
Waterlow, J.C.	Whicher, J.	Willson, R.		
Watts, R.W.E.	White, B.J.R.	Windle, J.R.		
Webb, D.J.	Widdicombe, J.G.	Windler, E.	Yazaki, Y.	Zanelli, J.M.
Webber, J.	Wilkinson, R.	Winearls, C.	Yoshioka, T.	Zidek, W.

## Volume 85

### AUTHOR INDEX

- Abbott, C.A. 77-81  
Aber, G.M. 747-751  
Achall, N. 585-591  
Adams, L. 229-236  
Adams, M.M. 183-188  
Adatia, I. 105-109  
Altomonte, F. 525-535  
Altura, B.M. 315-318  
Altura, B.T. 315-318  
Amano, J. 165-168  
Anderson, J. 431-436  
Arner, P. 237-244, 247-256  
Aronson, J.K. 725-731  
Arribas, I. 615-621  
Arrol, S. 77-81  
Atherton, J.C. 129-137  
Ationu, A. 1-4  
Atucha, N.M. 139-145  
Averbukh, Z. 713-716  
  
Bäcker, A. 593-597  
Baggio, B. 41-44  
Baker, F. 27-31, 445-449  
Baldi, S. 525-535  
Balfour, D.J.K. 487-494  
Ballmer, P.E. 337-342  
Balment, R.J. 129-137  
Barbour, R.L. 315-318  
Barnes, P.J. 385-388  
Bassendine, M.F. 289-293  
Bates, D.O. 737-746  
Beilin, L.J. 63-70  
Bell, G.M. 557-562  
Bennett, M.K. 281-287  
Bennett, T. 175-181  
Bevington, A. 445-449  
Bhatia, J. 709-712  
Bhatnagar, D. 77-81  
Birring, S. 5-12  
Bone, J.M. 733-736  
Boon, N.A. 725-731  
Borzi, R.M. 353-351  
Boulton, A.J.M. 77-81  
Brace, C. 599-606  
Braganza, J.M. 213-218  
Brandi, L.S. 525-535  
Brat, A. 411-416  
  
Brawley, V. 709-712  
Brearley, C.J. 725-731  
Brooke-Waveil, K. 701-708  
Brown, A.StJ.M. 281-287  
Brown, J. 27-31, 445-449  
Brown, M.J. 393-399  
Brown, N.S. 537-542  
Bruce, R. 269-275  
Buckley, M.G. 13-17  
Bülow, J. 247-256  
Burgess, W.J. 129-137  
Burt, A.D. 281-287  
Bylin, G. 237-244  
  
Calverley, P.M.A. 637-642  
Campbell, G.R. 501-513  
Campbell, J.H. 501-513  
Cappuccio, F.P. 479-485  
Carmichael, D.J.S. 465-470  
Carter, J. 637-642  
Carter, N. 1-4  
Caswell, A.M. 569-575  
Chalon, S. 761-762  
Chan, S.L.F. 671-677  
Channer, K.S. 361-366  
Chapuy, P. 203-211  
Chen, C.F. 123-127  
Clague, J.E. 637-642  
Clark, C.V. 101-104  
Clark, P.M. 97-100  
Cockcroft, J.R. 687-693  
Cohen, N. 713-716  
Connell, J.M.C. 19-26, 431-436  
Connelly, P.W. 269-275  
Conti, A. 411-416  
Cooper, B.T. 111-115  
Cordon, S.M. 563-568  
Corfiatis, T. 389-392  
Corssmit, E.P.M. 679-685  
Cosseddu, D. 309-314  
Cotariu, D. 713-716  
Cox, L. 97-100  
Critchley, M. 733-736  
Croft, K.D. 63-70  
Crook, M. 219-222  
Cupisti, A. 445-449  
  
D'Angelo, A. 41-44  
D'Souza, R.J. 747-751  
Davenport, A.P. 169-173  
Davies, D.L. 19-26  
Davis, G. 717-724  
Day, C.P. 281-287  
Démolis, P. 761-762  
Deutz, N.E.P. 437-444  
Diamond, M.P. 197-202  
Diez-Marqués, M.L. 615-621  
Donnelly, R. 431-436  
Duffy, J.M. 343-351  
Duncan, A. 623-627  
Durrington, P.N. 77-81  
  
Ebihara, I. 295-301  
Elborn, J.S. 563-568  
Elliott, T.G. 687-693  
Endert, E. 679-685  
Evans, T.W. 71-75  
  
Fabbri, M. 353-359  
Facchini, A. 353-359  
Falke, K. 643-649  
Farrell, D.J. 281-287  
Fasano, L. 353-359  
Felton, C. 89-95  
Ferrannini, E. 327-335, 525-535  
Ferro, A. 393-399  
Firth, J.D. 417-424  
Foegh, M.L. 183-188  
Fortney, S.M. 695-700  
Franchi, F. 411-416  
Frascerca, S. 525-535  
Frayn, K.N. 373-384  
Freestone, S. 607-614  
Frier, B.M. 101-104  
Fronzaroli, C. 411-416  
  
Galletly, D.C. 389-392  
Gambaro, G. 41-44  
Garcia-Escribano, C. 615-621  
Garcia-Estañ, J. 139-145  
Gardiner, S.M. 175-181  
Garlick, P.J. 337-342  
Georgiadis, D. 761

- Gilat, T. 451–454  
 Gillon, R.L. 455–463  
 Girgis, S.I. 385–388  
 Godsland, I.F. 89–95  
 Gohel, M.D.I. 33–39  
 Gokal, R. 495–500  
 Golik, A. 713–716  
 González-Rubio, M. 615–621  
 Gordon, C. 77–81  
 Gould, B.J. 521–524  
 Grant, I. 337–342  
 Gray, R.P. 549–555  
 Green, R. 5–12  
 Griffiths, L.R. 189–195  
 Griffiths, M.J.D. 71–75  
 Grigolo, B. 353–359  
 Grime, J.S. 733–736  
 Grimshaw, J. 343–351  
 Groop, P.-H. 687–693  
 Grossett, D.G. 761  
 Grover, P.K. 303–307  
 Guidicelli, J.-F. 761–762  
 Guthrie, D.J.S. 343–351  
  
 Hallak, A. 451–454  
 Haond, P. 203–211  
 Haq, A. 659  
 Haq, M. 219–222  
 Haq, S. 219–222  
 Harcombe, A.A. 169–173  
 Hardman, A.E. 701–708  
 Harris, K.P.G. 27–31, 445–449  
 Harty, H.R. 229–236  
 Hatfield, E. 599–606  
 Haworth, S.G. 105–109  
 Heeneman, S. 437–444  
 Hegele, R.A. 269–275  
 Held, C. 577–583  
 Hené, R.J. 471–477  
 Hepburn, D.A. 101–104  
 Herembert, T. 57–61  
 Heywood, P. 229–236  
 Hjemdahl, P. 401–409, 577–583  
 Honda, K. 83–88  
 Howard, A. 385–388  
 Howell, M.H. 183–188  
 Huang, C. 717–724  
  
 Iqbal, T.H. 111–115  
  
 Jackson, M.J. 733–736  
 Jacobs, M.-C. 51–55  
 Jacobs, S.C. 117–122  
 James, O.F.W. 281–287, 289–293  
  
 Jamison, J.P. 367–371  
 Jansen, J.B.M.J. 277–280  
 Jardine, A.G. 19–26  
 Jenkins, A.L. 269–275  
 Jenkins, D.J.A. 269–275  
 John, E.J. 717–724  
 Johnson, N.R. 607–614  
 Jones, P.R.M. 701–708  
 Jones, P.W. 747–751  
 Jörres, D. 643–649  
  
 Kaartinen, J.M. 265–268  
 Kaczmarczyk, G. 643–649  
 Kahan, T. 401–409  
 Kapaniris, O. 623–627  
 Kapma, J.A. 51–55  
 Karp, W.B. 709–712  
 Kashtan, H. 269–275  
 Kelling, C.L. 753–760  
 Kemp, G.J. 105–109  
 Kemp, P.A. 175–181  
 Kerr, D. 197–202  
 Kerr, S. 197–202  
 Kibble, J.D. 5–12  
 Koide, H. 295–301  
 Koomans, H.A. 471–477  
 Kramer, H.J. 593–597  
 Krebs, M. 643–649  
 Krentz, A.J. 97–100  
 Kuc, R.E. 169–173  
 Kulkarni, R.N. 45–49  
 Kumar, S. 77–81  
  
 La Villa, G. 411–416  
 Lagarde, M. 203–211  
 Lamers, C.B.H.W. 277–280  
 Lang, C.C. 147–156, 487–494  
 Lazzeri, C. 411–416  
 Lee, M.R. 607–614  
 Lees, K.R. 761  
 Legon, S. 385–388  
 Leikauf, G.D. 753–760  
 Lenders, J.W.M. 51–55  
 Leong, W.S. 569–575  
 Lever, A.F. 157–163  
 Levick, J.R. 737–746  
 Lewis, K.O. 111–115  
 Li Kam Wa, T.C. 607–614  
 Lieverse, R.J. 277–280  
 Lightfoot, J.T. 695–700  
 Lightman, S.L. 465–470, 599–606  
 Lightstone, L. 515–519  
 Linari, F. 309–314  
 Lindley, K.J. 629–635  
  
 Lindqvist, M. 401–409  
 Links, T.P. 319–325  
 Lock, C. 445–449  
 Lund, P. 373–384  
  
 Macdonald, I.A. 537–542, 543–548, 563–568  
 MacFadyen, R.J. 157–163  
 MacGregor, G.A. 13–17  
 Mackness, M.I. 77–81  
 Madiai, S. 411–416  
 Mak, J.C.W. 385–388  
 Maltby, P. 733–736  
 Marangella, M. 309–314  
 Marche, P. 57–61  
 Marchini, F. 41–44  
 Markandu, N.D. 13–17  
 Markell, M.S. 315–318  
 Marra, N. 411–416  
 Marshall, V.R. 303–307  
 Martinez-Onsurbe, P. 615–621  
 Marumo, F. 165–168  
 Marvel, J. 515–519  
 Masclee, A.A.M. 277–280  
 Mason, H. 557–562  
 McClelland, P. 557–562  
 McIver, B. 101–104  
 McKinley, R.K. 367–371  
 McMahan, L.P. 417–424  
 McNally, G.M. 343–351  
 McNurlan, M.A. 337–342  
 McQueen, J. 19–26  
 Mehring, N. 425–429  
 Mei, G. 213–218  
 Melcher, A. 401–409  
 Meliconi, R. 353–359  
 Meskini, N. 203–211  
 Messent, M. 71–75  
 Meyer-Lehnert, H. 593–597  
 Michael, C.A. 63–70  
 Michel, H. 593–597  
 Migas, I. 593–597  
 Milla, P.J. 629–635  
 Millard, S. 623–627  
 Misso, N.L.A. 455–463  
 Mistry, C.D. 495–500  
 Modai, D. 713–716  
 Mollan, R.A.B. 343–351  
 Moriarty, K.T. 537–542, 543–548  
 Morice, A.H. 361–366  
 Morris, A.D. 431–436  
 Morris, B.J. 189–195  
 Mortimer, P.S. 737–746  
 Motwani, J.G. 147–156

- Muller, D.P.R. 629–635  
 Mullinger, R.N. 543–548  
 Muneer, A. 5–12  
  
 Nakamura, T. 295–301  
 Natali, A. 327–335, 525–535  
 Natrass, M. 97–100  
 Nemoz, G. 203–211  
 Neusser, M. 425–429  
 Nicholl, C.G. 385–388  
 Njuki, F. 385–388  
 Nogami, M. 651–657  
 Norgan, N.G. 701–708  
 Norman, R.I. 585–591  
  
 O'Connell, J.E. 19–26  
 Ohisalo, J.J. 265–268  
 Olukoga, A.O. 77–81  
 Oosterhuis, H.J.G.H. 319–325  
 Osada, S. 295–301  
 Ozawa, K. 83–88  
  
 Pageaux, J.F. 203–211  
 Palmer, J.M. 289–293  
 Patrick, A.W. 557–562  
 Patterson, D.L.H. 549–555  
 Pearson, M.G. 637–642  
 Peart, W.S. 465–470, 599–606  
 Pecori, N. 327–335  
 Peel, A.S. 521–524  
 Pell, A.C.H. 101–104  
 Persidis, A. 169–173  
 Petersen, J.S. 129–137  
 Petrarulo, M. 309–314  
 Petrie, J.R. 431–436  
 Phillips, H.M. 747–751  
 Pirie, S.C. 5–12  
 Plange-Rhule, J. 129–137  
 Plumpton, C. 169–173, 393–399  
 Porstmann, T. 353–359  
 Prigent, A.F. 203–211  
  
 Quesada, T. 139–145  
 Quiñones Galvan, A. 327–335  
  
 Rabelink, T.J. 471–477  
 Radda, G.J. 105–109  
 Rahman, A.R.A. 147–156, 487–494  
 Raine, A.E.G. 725–731  
 Rajagopalan, B. 105–109  
 Ramot, Y. 713–716  
 Ramwell, P.W. 183–188  
 Raz, M. 753–760  
 Redman, C.W.G. 417–424  
  
 Rehnqvist, N. 577–583  
 Reid, J.L. 157–163  
 Reitsma, W.D. 319–325  
 Rennard, S.I. 651–657, 753–760  
 Reynisdottir, S. 237–244  
 Riond, J.-L. 223–228  
 Ritchie, J. 63–70  
 Ritter, J.M. 687–693  
 Robbins, R.A. 753–760  
 Robinson, B.J. 389–392  
 Rodrigues, D. 45–49  
 Rodriguez-Puyol, D. 615–621  
 Rodriguez-Puyol, M. 615–621  
 Roediger, W.E.W. 623–627  
 Romberger, D.J. 651–657  
 Romijn, J.A. 679–685  
 Rosenberg, R. 451–454  
 Rossaint, R. 643–649  
 Rowe, S.A. 695–700  
 Rubin, P.C. 175–181  
 Russell, R.G.G. 569–575  
 Rustom, R. 733–736  
 Ryall, R.L. 303–307  
  
 Sagnella, G.A. 13–17  
 Salvetti, A. 327–335  
 Samson, R.R. 607–614  
 Sano, K. 83–88  
 Santoro, D. 327–335, 525–535  
 Sauerwein, H.P. 679–685  
 Schmidt, L. 63–70  
 Schofield, D. 213–218  
 Sever, P.S. 661–670  
 Shailesh Kumar, M.V. 45–49  
 Shale, D.J. 563–568  
 Shalmi, M. 129–137  
 Sherwin, R.S. 197–202  
 Shetty, P.S. 45–49  
 Shichiri, M. 165–168  
 Shum, D.K.Y. 33–39  
 Simpson, E.J. 537–542, 543–548  
 Singer, D.R.J. 1–4, 13–17  
 Smit, A.J. 319–325  
 Smits, P. 51–55  
 Sömjen, G.J. 451–454  
 Sorensen, K. 1–4  
 Speake, P.F. 5–12  
 Spedding, P.L. 343–351  
 Spurzem, J.R. 753–760  
 Squire, I.B. 761  
 Stensel, D.J. 701–708  
 Stern, H. 269–275  
 Stevenson, A. 557–562  
 Stewart, G.A. 455–463  
 Stine, L.C. 753–760  
  
 Stockdale, H.R. 733–736  
 Strange, R.C. 747–751  
 Strazzullo, P. 479–485  
 Struthers, A.D. 147–156, 487–494  
 Sturani, C. 353–359  
 Sunamori, M. 165–168  
 Sunman, W. 661–670  
 Sutters, M. 465–470, 599–606  
 Suzuki, A. 165–168  
  
 Taddei, S. 327–335  
 Takahashi, T. 295–301  
 Tamborlane, W.V. 197–202  
 Tanaka, A. 83–88  
 Tanaka, K. 83–88  
 Tattersall, R.B. 537–542, 543–548  
 Taylor, D. 5–12  
 Taylor, D.J. 105–109  
 Taylor, M.L. 455–463  
 Tepel, M. 425–429  
 Thien, T. 51–55  
 Thompson, P.J. 455–463  
 Tobin, P.D. 389–392  
 Toews, M.L. 651–657  
 Tomino, Y. 295–301  
 Tosti Guerra, C. 411–416  
 Tree, M. 157–163  
 Trocha-Grimshaw, J. 343–351  
 Tuominen, R.K. 265–268  
 Tutt, P. 219–222  
  
 Uemoto, S. 83–88  
 Unger, V. 643–649  
  
 Vallance, D. 701–708  
 van Tilborg, K.A. 471–477  
 Vandongen, R. 63–70  
 Vaz, M. 45–49  
 Vena, S. 411–416  
 Vericel, E. 203–211  
 Viberti, G.C. 687–693  
 Vikman, H.-L. 265–268  
 Vincenti, M. 41–44  
 Vitale, C. 309–314  
  
 Wahrenberg, H. 237–244  
 Walker, B. 343–351  
 Walker, B.R. 257–263  
 Walker, M. 373–384  
 Wallén, N.H. 577–583  
 Walls, J. 27–31, 445–449

- Walsh, E. 343–351  
 Walters, B.N.J. 63–70  
 Weissberg, P.L. 169–173  
 Weissgarten, J. 713–716  
 Western, P.J. 563–568  
 White, M.C. 557–562  
 Whitehead, B. 1–4  
 Whitehurst, A. 599–606  
 Wickens, D.G. 549–555  
 Williams, C.M. 521–524
- Winder, A.F. 701–708  
 Wolfe, M.S. 183–188  
 Woodmansey, P.A. 361–366  
 Wynn, V. 89–95
- Yamamoto, M. 295–301  
 Yaqoob, M. 557–562  
 Yeaman, S.J. 281–287, 289–293  
 Ying, L.-H. 189–195
- Yudkin, J.S. 549–555
- Zahariadis, G. 269–275  
 Zaidenstein, R. 713–716  
 Zampelas, A. 521–524  
 Zee, R.Y.L. 189–195  
 Zhang, F. 361–366  
 Zhu, D.L. 57–61  
 Zhu, Z. 425–429  
 Zidek, W. 425–429

## Volume 85

### SUBJECT INDEX

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

- Acetylsalicylic acid  
 platelet aggregation, adrenaline 577–583
- Acetyltransferase  
 neutrophils, asthma 455–463
- Acidosis  
 amino acids, skeletal muscle 445–449
- Acute-phase proteins  
 sialic acid, hypertriglyceridaemia 219–222
- Acute-phase reaction  
 protein synthesis, nutrient intake 337–342
- Adenosine diphosphate  
 platelet aggregation, acetylsalicylic acid 577–583
- Adenosine triphosphate  
 cartilage, tumour necrosis factor- $\alpha$  569–575
- Adenovirus  
 flavivirus, non-structural protein 1, vaccines 117–122
- Adenylate cyclase  
 receptor down-regulation, bronchial epithelium 651–657
- Adipocytes  
 guanine-nucleotide-binding proteins, protein kinase C 265–268
- Adipose tissue  
 $\beta$ -adrenoceptors, glucocorticoids 237–244  
 substrate oxidation, respiratory quotient 373–384\*
- Adipose tissue blood flow  
 microdialysis 247–256\*
- Adipose tissue metabolism  
 microdialysis 247–256\*
- Adrenal cortex hormones  
 blood pressure 257–263
- Adrenaline  
 platelet aggregation, acetylsalicylic acid 577–583
- Adrenergic stimulation  
 atrial natriuretic peptide 5–12
- $\beta_1$ -Adrenoceptor blockade  
 receptor cross-regulation, right atrial appendage 393–399
- $\alpha_2$ -Adrenoceptors  
 insulin secretion 671–677
- $\beta$ -Adrenoceptors  
 asthma, glucocorticoids 237–244  
 down-regulation, bronchial epithelium 651–657  
 receptor cross-regulation, right atrial appendage 393–399
- Adrenocorticotrophic hormone  
 blood pressure 257–263
- Ageing  
 blood mononuclear cells, glutathione peroxidase 203–211
- Airway pressure  
 antidiuretic hormone, extracellular volume expansion 643–649
- Albuminuria  
 glomerulosclerosis 27–31



- Aldosterone**  
 angiotensin II infusion, losartan 157–163  
 5-hydroxytryptamine 607–614  
 neutral endopeptidase inhibition 19–26
- Amino acids**  
 liver and intestine, glutamine 437–444  
 parenteral nutrition, hydrogen peroxide 709–712  
 skeletal muscle, acidosis 445–449
- Amlodipine**  
 pulmonary arteries, chronic hypoxia 361–366
- Ammonia**  
 liver and intestine, glutamine 437–444
- Amniotic membrane**  
 endothelin gene expression, pre-eclampsia 417–424
- Amylin**  
 receptor, lung 385–388
- Angio-oedema**  
 angiotensin-converting enzyme inhibitors 661–670\*
- Angiopeptin**  
 myointimal hyperplasia, angioplasty 183–188
- Angioplasty**  
 myointimal hyperplasia, angiopeptin 183–188
- Angiotensin II**  
 angiotensin-converting enzyme inhibitors 661–670\*  
 cardiovascular function, losartan 157–163  
 cerebral vasoconstriction, magnesium sulphate 175–181  
 clearance, losartan 157–163  
 insulin resistance 431–436  
 natriuresis 147–156  
 neutral endopeptidase inhibition 19–26
- Angiotensin-converting enzyme**  
 restriction fragment length polymorphism, hypertension 189–195
- Angiotensin-converting enzyme inhibitors**  
 non-angiotensin effects 661–670\*
- Anion transport**  
 erythrocytes, nephrolithiasis 41–44
- Anterior chamber of eye**  
 hypoglycaemia, autonomic nervous system 101–104
- Antidiuretic hormone**  
 airway pressure, extracellular volume expansion 643–649
- Antimitochondrial antibodies**  
 pyruvate dehydrogenase, primary biliary cirrhosis 289–293
- Apolipoprotein B-48**  
 immunoassay, postprandial lipidaemia 521–524
- Aprotinin**  
 renal tubular peptide metabolism, chronic renal failure 733–736
- Aqueous humour**  
 hypoglycaemia, autonomic nervous system 101–104
- Arachidonic acid**  
 blood mononuclear cells, ageing 203–211
- Arginine vasopressin**  
 salt restriction, diuresis 465–470
- Arterialization**  
 minimal models, arterialization 89–95
- Arteriovenous catheterization technique**  
 adipose tissue metabolism 247–256\*
- Arteriovenous differences**  
 substrate oxidation, respiratory quotient 373–384\*
- Arthritis**  
 prostaglandins, cytokines 569–575
- Articular chondrocytes**  
 prostaglandins, cytokines 569–575
- Aspirin**  
 platelet aggregation, adrenaline 577–583
- Asthma**  
 acetyltransferase, neutrophils 455–463  
 $\beta$ -adrenoceptors, glucocorticoids 237–244  
 peak expiratory flow rate, variability 367–371
- ATP-sensitive K<sup>+</sup> channels**  
 imidazoline, insulin secretion 671–677
- Atrial natriuretic peptide**  
 adrenergic stimulation 5–12  
 airway pressure, extracellular volume expansion 643–649  
 cyclic GMP, sodium 13–17  
 dynorphin, heart transplantation 1–4  
 hypertension, posture 411–416  
 neutral endopeptidase inhibition 19–26  
 pericardial fluid, congestive heart failure 165–168
- Autoantigen**  
 pyruvate dehydrogenase, primary biliary cirrhosis 289–293
- Autonomic nervous system**  
 anterior chamber of eye, hypoglycaemia 101–104
- Balloon injury**  
 myointimal hyperplasia, angiopeptin 183–188
- Bile**  
 polyamines, high-performance liquid chromatography 451–454
- Blood glutathione**  
 measurement technique 213–218
- Blood mononuclear cells**  
 glutathione peroxidase, ageing 203–211
- Blood pressure**  
 antinatriuresis, insulin 327–335  
 corticosteroid receptors 257–263  
 nitrous oxide, spectral analysis 389–392

- Body composition**  
   exercise, lipoproteins 701–708
- Bombesin**  
   satiety, cholecystokinin 277–280
- Bone formation**  
   osteoporosis, parathyroid hormone 223–228
- Bradykinin**  
   angiotensin-converting enzyme inhibitors 661–670\*
- Brain natriuretic peptide**  
   hypertension, posture 411–416
- Brattleboro rat**  
   fluid balance, servo-system 129–137
- Breathlessness**  
   visual analogue scale, exercise 229–236
- Bronchial epithelium**  
    $\beta$ -adrenoceptor down-regulation 651–657  
   neutrophil chemotactic activity, bronchitis 753–760
- Bronchitis**  
   bronchial epithelial cells, neutrophil chemotactic activity 753–760
- n-Butyrate**  
   sulphides, ulcerative colitis 623–627
- Butyrylcholinesterase**  
   hypertriglyceridaemia, diabetes mellitus 77–81
- Ca<sup>2+</sup>-Mg<sup>2+</sup>-ATPase**  
   erythrocytes, hypertension 585–591
- Cachexia**  
   cystic fibrosis, tumour necrosis factor- $\alpha$  563–568
- Calcitonin**  
   receptor, lung 385–388
- Calcitonin-gene-related peptide**  
   receptor, lung 385–388
- Calcitriol**  
   calcium oxalate, haemodialysis 309–314
- Calcium**  
   hypertension, insulin 425–429  
   renal transplantation, cyclosporin 315–318
- Calcium antagonist**  
   pulmonary arteries, chronic hypoxia 361–366
- Calcium metabolism**  
   bone formation, parathyroid hormone 223–228
- Calcium oxalate**  
   calcitriol, haemodialysis 309–314  
   crystallization, glycosaminoglycans 33–39  
   urate, epitaxy 303–307
- Calcium phosphate**  
   calcitriol, haemodialysis 309–314
- Candoxatril**  
   renal and hormonal effects 19–26
- Carbon dioxide**  
   arteriovenous differences, substrate oxidation 373–384\*
- Cardiac transplant**  
   lower body negative pressure, syncope 695–700
- Cardiovascular responses**  
   isometric contraction, variability 45–49
- Cardiovascular risk**  
   sialic acid, hypertriglyceridaemia 219–222
- Cartilage**  
   prostaglandins, cytokines 569–575
- Catecholamines**  
   hypoglycaemia 537–542  
   hypoglycaemia, hyperinsulinaemic glucose clamps 543–548  
   psychological stress, hypertension 401–409
- CD45RA**  
   T cells, immunological memory 515–519
- Cell culture**  
   vascular smooth muscle 501–513\*
- Cell dispersion**  
   vascular smooth muscle 501–513\*
- Cell proliferation**  
   hydrogen peroxide, growth factors 747–751
- Cell signalling**  
   tyrosine kinase, vasopressin 57–61
- Cerebral artery blood flow velocity**  
   transcranial Doppler sonography, repeatability 761–762
- C-fibres**  
   syncope, cardiac transplant 695–700
- Cholecystokinin**  
   bombesin, satiety 277–280
- Cholesterol**  
   DNA markers, dietary fibre 269–275  
   liver transplantation 83–88  
   magnesium, cyclosporin 315–318
- Cholinergic stimulation**  
   atrial natriuretic peptide 5–12
- Chondroitin sulphate**  
   calcium oxalate crystallization 33–39
- Chronic hypoxia**  
   pulmonary arteries, amlodipine 361–366  
   renal function, renal ischaemia 123–127
- Chronic renal failure**  
   aprotinin, renal tubular peptide metabolism 733–736  
   ion transport, dialysis 725–731
- Chylomicrons**  
   apolipoprotein B-48, postprandial lipidaemia 521–524
- Cirrhosis**  
   phosphatidate phosphohydrolase, second messengers 281–287  
   renal haemodynamics 139–145

- Cognition**  
hypoglycaemia, counterregulatory hormones 197–202
- Colloid osmosis**  
hypo-osmolar solutions, peritoneal dialysis 495–500
- Colonocytes**  
short-chain acyl-CoA dehydrogenase, sulphides 623–627
- Competitive inhibition**  
angiotensin II, losartan 157–163
- Congenital heart disease**  
cyanosis, skeletal muscle metabolism 105–109
- Congestive heart failure**  
atrial natriuretic peptide, pericardial fluid 165–168
- Continuous ambulatory peritoneal dialysis**  
ion transport, chronic renal failure 725–731
- Corticosteroid receptors**  
blood pressure 257–263
- Cough**  
angiotensin-converting enzyme inhibitors 661–670\*
- Counterregulation**  
hypoglycaemia 197–202, 537–542  
hypoglycaemia, hyperinsulinaemic glucose clamps 543–548
- Culture techniques**  
vascular smooth muscle 501–513\*
- Cyanosis**  
skeletal muscle metabolism, congenital heart disease 105–109
- Cyclic GMP**  
atrial natriuretic peptide, sodium 13–17  
pericardial fluid, congestive heart failure 165–168
- Cyclosporin**  
magnesium, cholesterol 315–318
- Cystic fibrosis**  
cachexia, tumour necrosis factor- $\alpha$  563–568
- Cytokines**  
glucose metabolism 679–685  
prostaglandins, cartilage 569–575
- Cytomegalovirus**  
major immediate early promoter, vaccines 117–122
- Cytosolic free calcium**  
hypertension, insulin 425–429
- Desamino-[8-D-arginine]vasopressin**  
diabetes insipidus, sodium restriction 599–606
- Diabetes insipidus**  
desamino-[8-D-arginine]vasopressin 599–606  
fluid balance, servo-system 129–137
- Diabetes mellitus**  
anterior chamber of eye, autonomic nervous system 101–104  
catecholamines 537–542  
endothelial dysfunction, oxidant injury 557–562  
hypertriglyceridaemia, butyrylcholinesterase 77–81  
hypouricaemia, glomerular filtration rate 713–716  
microalbuminuria, nitric oxide 687–693  
reperfusion, free radicals 549–555
- Diabetic nephropathy**  
endothelial dysfunction, oxidant injury 557–562
- Dialysis**  
ion transport, chronic renal failure 725–731
- Dietary fibre**  
lipoproteins, DNA markers 269–275
- Dietary sodium**  
diabetes insipidus, desamino-[8-D-arginine]vasopressin 599–606  
diuresis, arginine vasopressin 465–470
- Diffusion**  
polyethylene glycols, solvents 111–115
- Disease severity**  
idiopathic pulmonary fibrosis, superoxide dismutase 353–359
- Diuresis**  
non-ascitic cirrhosis 139–145  
salt restriction, arginine vasopressin 465–470
- DNA markers**  
lipoproteins, dietary fibre 269–275
- DNA synthesis**  
vasopressin 57–61
- Dynorphin**  
ventricular expression, heart transplantation 1–4
- Eclampsia**  
cerebral vasoconstriction, magnesium sulphate 175–181
- Efaroxan**  
ATP-sensitive K<sup>+</sup> channels, insulin secretion 671–677
- Eicosanoids**  
angiotensin-converting enzyme inhibitors 661–670\*  
leucocytes, pre-eclampsia 63–70
- Electroelution**  
endothelin receptors 169–173
- Endomyocardial biopsy**  
dynorphin, heart transplantation 1–4
- Endothelial dysfunction**  
diabetic nephropathy 557–562

- Endothelin  
  cerebral vasoconstriction, magnesium sulphate 175–181  
  gene expression, pre-eclampsia 417–424  
  receptors, mobility shift assay 169–173  
  receptors, sodium and water intake 593–597  
  structure 659
- Endothelium-dependent relaxing factor  
  angiotensin-converting enzyme inhibitors 661–670\*  
  smoking 51–55
- Endurance fitness  
  exercise, lipoproteins 701–708
- Enkephalin  
  angiotensin-converting enzyme inhibitors 661–670\*
- Epidemiology  
  lithium clearance 479–485
- Epitaxy  
  calcium oxalate crystallization, urate 303–307
- Erythrocytes  
  membrane properties, hypertension 585–591  
  urate transport, nephrolithiasis 41–44
- Erythropoietin  
  hypertension, packed cell volume 717–724
- Exercise  
  breathlessness, visual analogue scale 229–236  
  lipoproteins, men 701–708
- Extracellular calcium  
  platelet aggregation, acetylsalicylic acid 577–583
- Extracellular matrix  
  metalloproteinases, lupus nephritis 295–301
- Extracellular volume expansion  
  antidiuretic hormone, airway pressure 643–649
- Eye  
  anterior chamber, hypoglycaemia 101–104
- F<sub>2</sub> generation  
  erythrocyte membrane properties, hypertension 585–591
- Fat cells  
   $\beta$ -adrenoceptors, glucocorticoids 237–244
- Fever  
  protein synthesis, nutrient intake. 337–342
- Flavivirus  
  non-structural protein 1, vaccines 117–122
- Fluid balance  
  servo-system, diabetes insipidus 129–137
- Fluorescence polarization anisotropy  
  erythrocytes, hypertension 585–591
- Free radicals  
  phototherapy, parenteral amino acid solutions 709–712  
  reperfusion, diabetes mellitus 549–555
- Fructosamine  
  hypouricaemia, diabetes mellitus 713–716
- Gallbladder  
  bile, polyamines 451–454
- Glomerular filtration rate  
  hypouricaemia, diabetes mellitus 713–716
- Glomerular proteinuria  
  diabetic nephropathy 557–562
- Glomerulonephritis  
  mesangial cell proliferation, hydrogen peroxide 747–751
- Glomerulosclerosis  
  leucocytes 27–31
- Glomerulus  
  leucocytes 27–31
- Glucocorticoids  
   $\beta$ -adrenoceptors, asthma 237–244
- Glucose kinetics  
  hypoglycaemia, counterregulatory hormones 197–202
- Glucose metabolism  
  prostaglandins, cytokines 679–685
- Glucose polymer  
  hypo-osmolar solution, peritoneal dialysis 495–500
- Glucose tolerance  
  proinsulin 97–100
- Glutamine  
  hepatic and intestinal metabolism 437–444
- Glutamine synthetase  
  hepatic and intestinal metabolism 437–444
- $\gamma$ -L-Glutamyl-5-hydroxy-L-tryptophan  
  sodium excretion 607–614
- Glutathione autoxidation 213–218
- Glutathione peroxidase  
  blood mononuclear cells, ageing 203–211
- Glycosaminoglycans  
  electrophoresis, calcium oxalate crystallization 33–39
- Growth factors  
  phosphatidate phosphohydrolase, liver fibrogenesis 281–287
- Growth hormone  
  5-hydroxytryptamine 607–614
- Guanine-nucleotide-binding proteins  
  protein kinase C, adipocytes 265–268  
  receptor cross-regulation, guanine-nucleotide-binding proteins 393–399
- <sup>1</sup>H-nuclear magnetic resonance spectroscopy  
  synovial fluid, arthritic disease states 343–351
- Haemodialysis  
  calcium oxalate, calcitriol 309–314  
  ion transport, chronic renal failure 725–731

- Haemodynamics**  
   angiotensin II infusion, losartan 157–163  
   psychological stress, hypertension 401–409
- Head-out immersion**  
   natriuresis, kidney transplantation 471–477
- Heart**  
   endothelin receptors, mobility shift assay 169–173
- Heart rate**  
   angiotensin II infusion, losartan 157–163  
   spectral analysis, nitrous oxide 389–392
- Heart transplantation**  
   dynorphin, ventricular expression 1–4
- Heparan sulphate**  
   calcium oxalate crystallization 33–39
- High-performance liquid chromatography**  
   polyamines, bile 451–454
- Hirudin**  
   platelet aggregation, acetylsalicylic acid 577–583
- Hormone regulation**  
   protein kinase C, adipocytes 265–268
- Hydrogen peroxide**  
   mesangial cell proliferation, growth factors 747–751  
   parenteral amino acid solutions, phototherapy 709–712
- Hydroxyecosatetraenoic acids**  
   arachidonic acid, ageing 203–211
- Hydroxysteroid dehydrogenase**  
   blood pressure 257–263
- 5-Hydroxytryptamine**  
   sodium excretion 607–614
- 5-Hydroxy-L-tryptophan**  
   sodium excretion 607–614
- Hypercapnia**  
   breathlessness, visual analogue scale 229–236  
   inspiratory effort sensation 637–642
- Hypercholesterolaemia**  
   myointimal hyperplasia, angiopeptin 183–188
- Hyperinsulinaemic glucose clamps**  
   hypoglycaemia, counterregulation 543–548
- Hypertension**  
   antinatriuresis, insulin 327–335  
   brain natriuretic peptide, posture 411–416  
   corticosteroid receptors 257–263  
   cytosolic free calcium, insulin 425–429  
   erythrocytes, membrane properties 585–591  
   genetic associations, restriction fragment length polymorphisms 189–195  
   packed cell volume, erythropoietin 717–724  
   pregnancy, platelet-activation factor 63–70  
   psychological stress, cardiovascular and sympatho-adrenal responses 401–409
- Hypertriglyceridaemia**  
   diabetes mellitus, butyrylcholinesterase 77–81  
   sialic acid, acute-phase protein 219–222
- Hyperuricosuria**  
   calcium oxalate crystallization, epitaxy 303–307
- Hypoglycaemia**  
   anterior chamber of eye, autonomic nervous system 101–104  
   catecholamines 537–542  
   counterregulation 197–202  
   counterregulation, hyperinsulinaemic glucose clamps 543–548
- Hypokalaemia**  
   insulin, hypertension 327–335
- Hypokalaemic periodic paralysis**  
   potassium channels 319–325
- Hypo-osmolar solutions**  
   peritoneal dialysis, colloid osmosis 495–500
- Hypothalamus**  
   calcitonin, receptor 385–388
- Hypouricaemia**  
   glomerular filtration rate, diabetes mellitus 713–716
- Hypoxia**  
   breathlessness, visual analogue scale 229–236  
   skeletal muscle metabolism, congenital heart disease 105–109
- Hypoxic pulmonary vasoconstriction**  
   ischaemia-reperfusion injury 71–75
- Idiopathic pulmonary fibrosis**  
   disease severity, superoxide dismutase 353–359
- Imidazoline**  
   ATP-sensitive K<sup>+</sup> channels, insulin secretion 671–677
- Immunoassay**  
   apolipoprotein B-48, postprandial lipidaemia 521–524
- Immunological memory**  
   T cells, CD45RA 515–519
- Impaired glucose tolerance**  
   proinsulin 97–100
- Indirect calorimetry**  
   substrate oxidation, respiratory quotient 373–384\*
- Inflammation**  
   neutrophil chemotactic activity, bronchitis 753–760  
   protein synthesis, nutrient intake 337–342
- Inositol phosphates**  
   DNA synthesis, vasopressin 57–61
- Inspiratory effort sensation**  
   hypercapnia 637–642
- Insulin**  
   antinatriuresis, hypertension 327–335  
   catecholamines 537–542  
   cytosolic free calcium, hypertension 425–429  
   dose-response kinetics, stress 525–535  
   hypoglycaemia, counterregulation 543–548  
   impaired glucose tolerance 97–100

- Insulin receptor**  
restriction fragment length polymorphisms, hypertension 189–195
- Insulin resistance**  
angiotensin II 431–436  
hypertriglyceridaemia, butyrylcholinesterase 77–81  
minimal models, arterialization 89–95  
substrate oxidation, stress 525–535
- Insulin secretion**  
 $\alpha_2$ -adrenoceptors 671–677  
potassium channels 319–325
- Interleukin-1 $\beta$**   
protein synthesis, nutrient intake 337–342
- Interleukin-6**  
mesangial cell proliferation, hydrogen peroxide 747–751
- Interstitial fluid**  
protein concentration, postmastectomy oedema 737–746
- Intestinal permeation**  
polyethylene glycols, solvents 111–115
- Intestine**  
metabolism, glutamine 437–444
- Ion transport**  
dialysis, chronic renal failure 725–731
- Ionized magnesium**  
renal transplantation, cyclosporin 315–318
- Ischaemia-reperfusion injury**  
hypoxic pulmonary vasoconstriction 71–75
- Ischaemic heart disease**  
platelet aggregation, acetylsalicylic acid 577–583
- Islet amyloid polypeptide**  
receptor, lung 385–388
- Isometric contraction**  
variability of response 45–49
- Jejunum**  
secretion, vitamin E 629–635
- Kidney**  
5-hydroxytryptamine 607–614
- Kidney transplantation**  
head-out immersion, natriuresis 471–477
- Lactulose**  
lipid solvents, diffusion 111–115
- Leucocytes**  
glomerulosclerosis 27–31  
platelet-activating factor, pre-eclampsia 63–70
- Lipid metabolism**  
liver transplantation 83–88
- Lipolysis**  
 $\beta$ -adrenoceptors, glucocorticoids 237–244
- Lipoproteins**  
diabetes mellitus, butyrylcholinesterase 77–81  
DNA markers, dietary fibre 269–275  
exercise, men 701–708
- Lipoxygenases**  
arachidonic acid, ageing 203–211
- Lithium clearance**  
epidemiology 479–485
- Liver**  
metabolism, glutamine 437–444  
protein synthesis, inflammation 337–342
- Liver fibrogenesis**  
phosphatidate phosphohydrolase, second messengers 281–287
- Liver transplantation**  
lipid metabolism 83–88
- Losartan**  
cardiovascular function, angiotensin II infusion 157–163
- Lower body negative pressure**  
syncope, cardiac transplant 695–700
- Lung**  
calcitonin, receptor 385–388
- Lupus nephritis**  
metalloproteinases, extracellular matrix 295–301
- Magnesium**  
renal transplantation, cyclosporin 315–318
- Magnesium sulphate**  
cerebral vasoconstriction, eclampsia 175–181
- Major immediate early promoter**  
cytomegalovirus, vaccines 117–122
- Malonyldialdehyde**  
renal failure, pancreatitis 615–621
- Mechanical ventilation**  
antidiuretic hormone, extracellular volume expansion 643–649
- Mechanoreceptors**  
syncope, cardiac transplant 695–700
- Membrane microviscosity**  
erythrocytes, hypertension 585–591
- Mesangial cells**  
hydrogen peroxide, growth factors 747–751
- Metalloproteinases**  
extracellular matrix, lupus nephritis 295–301
- Methacholine**  
vasodilatation, smoking 51–55
- Microalbuminuria**  
diabetes mellitus, nitric oxide 687–693
- Microdialysis**  
adipose tissue metabolism 247–256\*
- Minimal models**  
insulin resistance, arterialization 89–95
- Mitogenesis**  
vasopressin 57–61

- Mobility shift assay**  
 endothelin receptors 169–173
- Muscle**  
 protein synthesis, inflammation 337–342  
 substrate oxidation, respiratory quotient 373–384\*
- Myocardial infarction**  
 free radicals, diabetes mellitus 549–555
- Myointimal hyperplasia**  
 angioplasty, angiopeptin 183–188
- Myometrium**  
 endothelin gene expression, pre-eclampsia 417–424
- Natriuresis**  
 angiotensin II 147–156  
 head-out immersion, kidney transplantation 471–477  
 non-ascitic cirrhosis 139–145
- Nephrolithiasis**  
 urate transport, erythrocytes 41–44
- Neuropeptide Y**  
 cerebral vasoconstriction, magnesium sulphate 175–181  
 psychological stress, hypertension 401–409
- Neutral endopeptidase inhibition**  
 renal and hormonal effects 19–26
- Neutrophil adhesion**  
 bronchial epithelium, bronchitis 753–760
- Neutrophil chemotactic activity**  
 bronchial epithelium, bronchitis 753–760
- Neutrophils**  
 acetyltransferase, asthma 455–463
- Nitric oxide**  
 cerebral vasoconstriction, magnesium sulphate 175–181  
 microalbuminuria, diabetes mellitus 687–693
- N<sup>G</sup>-Nitro-L-arginine methyl ester**  
 cerebral vasoconstriction, magnesium sulphate 175–181
- Nitrous oxide**  
 heart rate, spectral analysis 389–392
- Non-structural protein 1**  
 flavivirus, vaccines 117–122
- Noradrenaline**  
 isometric contraction, variability 45–49  
 sodium and water excretion 487–494
- Nutrient intake**  
 protein synthesis, inflammation 337–342
- Oedema**  
 interstitial fluid protein concentration, mastectomy 737–746
- Omentum**  
 guanine-nucleotide-binding proteins, protein kinase C 265–268
- Orthostasis**  
 heart rate, nitrous oxide 389–392
- Osteoarthritis**  
 synovial fluid, <sup>1</sup>H-nuclear magnetic resonance spectroscopy 343–351
- Osteoporosis**  
 bone formation, parathyroid hormone 223–228
- Oxalate**  
 calcitriol, haemodialysis 309–314  
 erythrocytes, nephrolithiasis 41–44
- Oxidant injury**  
 diabetic nephropathy 557–562
- Oxidative stress**  
 glutathione 213–218
- Oxygen**  
 arteriovenous differences, substrate oxidation 373–384\*
- <sup>31</sup>P-nuclear magnetic resonance spectroscopy  
 skeletal muscle metabolism, congenital heart disease 105–109
- Packed cell volume**  
 hypertension, erythropoietin 717–724
- Pancreatitis**  
 renal failure, somatostatin 615–621
- Parathyroid hormone**  
 bone formation, osteoporosis 223–228
- Parenteral nutrition**  
 phototherapy, hydrogen peroxide 709–712
- Peak expiratory flow rate**  
 variability, asthma 367–371
- Pericardial fluid**  
 atrial natriuretic peptide, congestive heart failure 165–168
- Peritoneal dialysis**  
 hypo-osmolar solutions, colloid osmosis 495–500
- Phospholipase C**  
 DNA synthesis, vasopressin 57–61
- Phospholipids**  
 bile, polyamines 451–454
- Phosphoramidon**  
 renal function, renal ischaemia 123–127
- Phototherapy**  
 hydrogen peroxide, parenteral amino acid solutions 709–712
- Placenta**  
 endothelin gene expression, pre-eclampsia 417–424
- Plasma glutathione**  
 measurement technique 213–218

- Platelet aggregation**  
 adrenaline, acetylsalicylic acid 577–583
- Platelet-activating factor**  
 leucocytes, pre-eclampsia 63–70  
 neutrophils, asthma 455–463
- Platelet-derived growth factor**  
 mesangial cell proliferation, hydrogen peroxide 747–751
- Polyamines**  
 bile, cholesterol 451–454
- Polyethylene glycols**  
 lipid solvents, diffusion 111–115
- Polymerase chain reaction**  
 restriction fragment length polymorphisms, hypertension 189–195
- Polymorphonuclear cell elastase**  
 idiopathic pulmonary fibrosis, disease severity 353–359
- Postmastectomy oedema**  
 interstitial fluid, protein concentration 737–746
- Postprandial lipidaemia**  
 apolipoprotein B-48, immunoassay 521–524
- Post-surgical insulin resistance**  
 substrate oxidation, insulin resistance 525–535
- Posture**  
 brain natriuretic peptide, hypertension 411–416
- Potassium**  
 insulin, hypertension 327–335
- Potassium channels**  
 hypokalaemic periodic paralysis 319–325
- Pre-eclampsia**  
 endothelin gene expression, placenta 417–424  
 leucocytes, platelet-activating factor 63–70
- Pregnancy**  
 hypertension, platelet-activating factor 63–70
- Primary biliary cirrhosis**  
 autoantigen, pyruvate dehydrogenase 289–293
- Proinsulin**  
 impaired glucose tolerance 97–100
- Prostaglandins**  
 cartilage, cytokines 569–575  
 glucose metabolism 679–685
- Protein**  
 interstitial fluid, postmastectomy oedema 737–746
- Protein kinase C**  
 DNA synthesis, vasopressin 57–61  
 guanine-nucleotide-binding proteins, adipocytes 265–268
- Protein synthesis**  
 nutrient intake, inflammation 337–342
- Pseudocholinesterase**  
 hypertriglyceridaemia, diabetes mellitus 77–81
- Psychological stress**  
 cardiovascular and sympatho-adrenal responses, hypertension 401–409
- Pulmonary arteries**  
 amlodipine, chronic hypoxia 361–366
- Pulmonary infection**  
 cachexia, tumour necrosis factor- $\alpha$  563–568
- Pulmonary insensitivity**  
 angiotensin II infusion, losartan 157–163
- Pyruvate dehydrogenase**  
 autoantigen, primary biliary cirrhosis 289–293
- Reactive oxygen species**  
 mesangial cell proliferation, growth factors 747–751  
 renal failure, pancreatitis 615–621
- Receptor cross-regulation**  
 right atrial appendage, guanine-nucleotide-binding proteins 393–399
- Receptor down-regulation**  
 adenylate cyclase, bronchial epithelium 651–657
- Receptor internalization**  
 adenylate cyclase, bronchial epithelium 651–657
- Recombinant human erythropoietin**  
 hypertension, packed cell volume 717–724
- Renal failure**  
 pancreatitis, somatostatin 615–621
- Renal function**  
 airway pressure, extracellular volume expansion 643–649  
 neutral endopeptidase inhibition 19–26  
 renal ischaemia, chronic hypoxia 123–127
- Renal haemodynamics**  
 non-ascitic cirrhosis 139–145  
 packed cell volume, erythropoietin 717–724
- Renal innervation**  
 head-out immersion, natriuresis 471–477
- Renal interstitial pressure**  
 non-ascitic cirrhosis 139–145
- Renal ischaemia**  
 renal function, chronic hypoxia 123–127
- Renal transplantation**  
 magnesium, cyclosporin 315–318
- Renal tubular peptide metabolism**  
 aprotinin, chronic renal failure 733–736
- Renal tubular function**  
 lithium clearance, epidemiology 479–485
- Renin**  
 5-hydroxytryptamine 607–614  
 neutral endopeptidase inhibition 19–26
- Renin-angiotensin system**  
 airway pressure, extracellular volume expansion 643–649  
 angiotensin-converting enzyme inhibitors 661–670\*  
 insulin resistance 431–436



- Repeatability**  
 transcranial Doppler sonography 761–762
- Reperfusion**  
 free radicals, diabetes mellitus 549–555
- Respiratory quotient**  
 substrate oxidation, indirect calorimetry 373–384\*
- Restenosis**  
 angioplasty, angiopeptin 183–188
- Resting energy expenditure**  
 cystic fibrosis, tumour necrosis factor- $\alpha$  563–568
- Restriction fragment length polymorphisms**  
 genetic associations, hypertension 189–195
- Retinyl palmitate**  
 chylomicrons, postprandial lipidaemia 521–524
- Rheumatoid arthritis**  
 synovial fluid,  $^1\text{H}$ -nuclear magnetic resonance spectroscopy 343–351
- Riboflavin**  
 hydrogen peroxide, parenteral amino acid solutions 709–712
- Right atrial appendage**  
 receptor cross-regulation, guanine-nucleotide-binding proteins 393–399
- Salt restriction**  
 diuresis, arginine vasopressin 465–470
- Satiety**  
 bombesin, cholecystokinin 277–280
- Second messengers**  
 phosphatidate phosphohydrolase, liver fibrogenesis 281–287
- Secretion**  
 jejunum, vitamin E 629–635
- Sensitivity**  
 peak expiratory flow rate, asthma 367–371
- Servo-system**  
 fluid balance, diabetes insipidus 129–137
- Short-chain acyl-CoA dehydrogenase sulphides, ulcerative colitis** 623–627
- Sialic acid**  
 acute-phase proteins, hypertriglyceridaemia 219–222
- Skeletal muscle**  
 amino acids, acidosis 445–449  
 congenital heart disease, cyanosis 105–109
- Small intestine**  
 secretion, vitamin E 629–635
- Small-vessel myography**  
 pulmonary arteries, chronic hypoxia 361–366
- Smoking**  
 endothelium-derived relaxing factor 51–55
- Sodium**  
 atrial natriuretic peptide, cyclic GMP 13–17  
 tubular handling, angiotensin II 147–156
- Sodium balance**  
 neutral endopeptidase inhibition 19–26
- Sodium excretion**  
 5-hydroxytryptamine 607–614  
 lithium clearance, epidemiology 479–485  
 noradrenaline 487–494
- Sodium hydrogen sulphide**  
 short-chain acyl-CoA dehydrogenase, ulcerative colitis 623–627
- Sodium intake**  
 diabetes insipidus, desamino-[8-D-arginine]vasopressin 599–606  
 endothelin receptors 593–597
- Sodium retention**  
 non-ascitic cirrhosis 139–145
- Solvents**  
 polyethylene glycols, diffusion 111–115
- Somatostatin**  
 renal failure, pancreatitis 615–621
- Somatostatin analogue**  
 myointimal hyperplasia, angioplasty 183–188
- Stress**  
 insulin resistance, substrate oxidation 525–535
- Substrate oxidation**  
 insulin resistance, stress 525–535  
 respiratory quotient, indirect calorimetry 373–384
- Sulphide**  
 short-chain acyl-CoA dehydrogenase, ulcerative colitis 623–627
- Superoxide dismutase**  
 idiopathic pulmonary fibrosis, disease severity 353–359
- Syncope**  
 C-fibre mechanoreceptors, cardiac transplant 695–700
- Synovial fluid**  
 $^1\text{H}$ -nuclear magnetic resonance spectroscopy, arthritic disease states 343–351
- T cells**  
 CD45RA, immunological memory 515–519
- Tick-borne encephalitis virus**  
 non-structural protein 1, vaccines 117–122
- Tissue inhibitor of metalloproteinases**  
 extracellular matrix, lupus nephritis 295–301
- Transcranial Doppler sonography**  
 repeatability 761–762
- T-tube**  
 bile, polyamines 451–454
- Tubular enzymuria**  
 diabetic nephropathy 557–562

- Tubular handling  
sodium, angiotensin II 147–156
- Tubular proteinuria  
diabetic nephropathy 557–562
- Tumour necrosis factor- $\alpha$   
cachexia, cystic fibrosis 563–568  
prostaglandins, cartilage 569–575
- Turpentine  
protein synthesis, nutrient intake 337–342
- Tyrosine kinase  
cell signalling, vasopressin 57–61
- Ulcerative colitis  
short-chain acyl-CoA dehydrogenase,  
sulphides 623–627
- Urate  
calcium oxalate crystallization, epitaxy 303–307  
erythrocytes, nephrolithiasis 41–44
- Urea  
liver, glutamine 437–444
- Uric acid  
diabetes, glomerular filtration rate 713–716
- Urinary excretion  
cyclic GMP, atrial natriuretic peptide 13–17
- Urolithiasis  
glycosaminoglycans 33–39  
urate, epitaxy 303–307
- Uterate vein  
endothelin, pre-eclampsia 417–424
- Vaccines  
flavivirus, non-structural protein 1 117–122
- Variability  
peak expiratory flow rate, asthma 367–371  
response to isometric contraction 45–49
- Vascular conductance  
magnesium sulphate 175–181
- Vascular reactivity  
microalbuminuria, diabetes mellitus 687–693
- Vascular resistance  
packed cell volume, erythropoietin 717–724  
psychological stress, hypertension 401–409
- Vascular smooth muscle  
culture techniques 501–513\*  
cytosolic free calcium, insulin 425–429
- Vasodilatation  
smoking 51–55
- Vasopressin  
DNA synthesis 57–61  
fluid balance, servo-system 129–137  
water excretion, noradrenaline 487–494
- Ventricular expression  
dynorphin, heart transplantation 1–4
- Visual analogue scale  
breathlessness, exercise 229–236
- Vitamin E  
jejunum, secretion 629–635
- Water deprivation  
endothelin receptors 593–597
- Water excretion  
noradrenaline, vasopressin 487–494