

AUTHOR INDEX

(Underscored numbers indicate complete papers in this volume.)

- Achuff, S.C., 240, 241
Adams, M.H., 276, 277
Adelman, A.G., 234
Afonso, S., 9
Alderman, E.L., 240
Alexander, J., 277
Alonso, D.R., 288
Alpers, J.B., 38
Alvaro, A.B., 234
Amsterdam, E.A., 276
Anderson, R.P., 277
Anderson, T.W., 148
Anrep, G.V., 159, 188
Apstein, C., 278
Archie, J.P., 111
Asada, S., 171
Ashfield, R., 195
Avruch, J., 38
Axelrod, J., 80
- Baay, J.E.M., 113
Baer, H.P., 38, 53
Balazas, T., 113
Barger, A.C., 188, 196
Barnabei, O., 39
Baroldi, G., 141-149, 147, 148, 149
Bartel, A.G., 241
Bassenge, E., 73-80, 79, 80
Bassingthwaighte, J.B., 190
Beazley, H., 260
Beck, C.S., 139
- Becker, L.C., 119, 159
Beddingfield, G., 276
Beer, N., 278
Begg, F., 147
Behnke, O., 38
Bender, H.W., 278
Benedetti, E.L., 38
Bennett, M.A., 287
Berger, R.L., 288
Berne, R.M., 3-10, 10, 25, 38, 53, 54, 69, 70, 112, 189
Bernhard, V.M., 234
Bernstein, E.F., 287
Betz, E., 171
Bilbro, R.H., 241
Bing, O.H.L., 119
Bittar, N., 9
Bjorck, L., 241
Blackmon, J.R., 25
Bloor, C.M., 159, 188, 190, 195, 279-289, 287, 288
Blumberg, J.M., 38, 53
Bohr, D.F., 25
Bolooki, H., 276
Bonanno, J.A., 276
Börgers, M., 38
Bor, N., 234
Bos, C.J., 38, 39
Bourassa, M.G., 277
Bourdeau-Martini, J., 55-71, 70, 71
Bowers, G.N., 38
Bowman, F.O., 278
Braasch, D., 171

- Brabander, M. de, 160
 Brachfield, N., 278
 Brandi, G., 111
 Brantigan, J.W., 171, 278
 Braunwald, E., 26, 111, 112, 277, 287, 288
 Brawley, R.K., 240, 278
 Brent, L.B., 147
 Bretschneider, H.J., 9, 54
 Brewer, D.B., 287
 Brewer, D.L., 241
 Browne, R.S., 140
 Bruce, R.A., 240
 Buckberg, G.D., 95-113, 111, 112, 113
 Bunnell, I.L., 289
 Burger, R.M., 38

 Caceres, L., 26
 Callaghan, R., 110
 Campeau, L., 277
 Carlson, R.G., 278, 288
 Carrier, O., 25, 70
 Carter, E.L., 189
 Case, R.B., 26, 11, 113
 Castonguay, Y.R., 278
 Caulfield, J.B., 148, 287
 Champlain, J. de, 79
 Chapman, D.W., 260
 Chapman, L., 148
 Chappel, C.I., 113
 Chari, R.S., 171
 Chatterjee, K., 240
 Chiba, T., 171
 Chidsey, C.A., 26
 Chimoskey, J.E., 189
 Chin, C.C., 112
 Chuck, L., 277
 Cobb, L.A., 240
 Cochran, W.G., 54
 Coleman, R., 38
 Collins, J.J., 278
 Colowick, S.P., 38
 Conti, C.R., 240
 Colley, D.A., 249-261, 260, 261
 Coolidge, G., 234
 Covell, J.W., 26, 112, 113, 277, 287, 288
 Cox, J.L., 148, 289
 Crampton, R.J., 26, 113
 Cranefield, P.F., 70
 Crawford, E.S., 260, 276
 Creveling, C.R., 39
 Crockett, J.E., 240
 Cross, F.S., 189
 Crumpton, C.W., 9
 Cullhed, I., 241
 Curnish, R.R., 10
 Cushing, W.B., 147
 Cuttarelli, R., 111

 Dabney, J.M., 26
 Dack, S., 110
 Daily, P.O., 277
 Daly, J.W., 39
 Damato, A.N., 189
 D'Angelo, G.J., 113
 Daugherty, R.M., 26
 Dawson, J.T., 249-261, 261
 DeGeest, H., 26
 DeLaria, G.A., 287
 Delin, N.A., 112
 DeSanctis, R.W., 287
 Detar, R., 10, 25
 Dhurandhar, R.W., 234
 Diederer, W., 161-171
 Dietmann, K., 9
 Dillard, D.H., 240
 Dimond, E.G., 240
 Dixon, W.J., 26
 Dobson, J.G., Jr., 10
 Domenench, R.J., 110, 159
 Donald, D.E., 79, 190
 Dong, L., 110
 Downing, S.E., 26
 Drabkin, D.L., 53
 Drummond, G.I., 38, 53
 Duling, B.R., 10, 70
 Duncan, E.L., 38, 53
 Dye, W.S., 110

 Eckstein, R.W., 140, 188, 189
 Edwards, J.E., 110

- Edwards, M.T., 38
 Effler, D.B., 260, 289
 Eienstein, R., 110
 Elliot, E.C., 173-190, 188, 190
 El-Said, G., 261
 Emmelot, P., 38, 39
 Enright, L.P., 276, 277
 Ettinger, P.O., 148
- Fairchild, H.M., 25
 Fallen, E.L., 112
 Fam, W.M., 189, 195
 Farr, A.L., 38
 Favaloro, R.G., 148, 260, 289
 Feinberg, H., 110
 Ferguson, T.B., 243-247
 Field, L.E., 110
 Fine, G., 110
 Finean, J.B., 38
 Finkelstein, L.J., 119
 Finney, J.O., 38
 Fisher, L.C., 70, 111
 Fisher, R., 234
 Fixler, D.E., 111
 Flameng, W., 151-160, 160
 Flemma, R., 240, 260, 276, 277, 278, 289
 Flowers, N.C., 148, 289
 Fortuin, N.J., 119, 159
 Frank, C.W., 241
 Frick, G.P., 38
 Friedberg, C.K., 110
 Frierson, J.L., 70
 Friesinger, G.C., 260
 Furuse, A., 278
- Gale, H., 276
 Garcia, E., 249-261, 261
 Gardner, T.H., 25, 26
 Gardner, T.J., 278
 Gaudry, R., 113
 Gauthier, p., 79
 Gavey, C.J., 195
 Gellai, M., 10, 25
 Gentry, M.K., 27-39, 38, 41-54
- Gerlach, E., 10
 Gibson, D., 195
 Gijpen, L., 160
 Gill, C., 277
 Ginks, W.R., 288
 Goldstein, D.A., 53
 Golenhofen, K., 171
 Gordon, G.B., 38, 53
 Gordy, E., 53
 Gorlin, R., 112, 278
 Gott, V.L., 171, 240, 278
 Green, G.S., 276
 Green, H.D., 139
 Greene, D.G., 289
 Greenfield, J., 277
 Gregg, D.E., 70, 79, 80, 111, 140, 148, 188, 189, 190, 195, 278, 288
 Griffith, L.S.C., 240, 241
 Griggs, D.M., 112
 Griswold, H.E., 276
 Grollman, J., 234
 Grondin, C.M., 278
 Grondin, P., 278
 Groves, L.K., 260
 Grunewald, W., 70
 Guyton, A.C., 25, 70
- Haddy, F.J., 26
 Haft, J.I., 189
 Hall, R.J., 189, 249-261, 261
 Hallen, A., 241
 Hallman, G.L., 249-261, 260, 261
 Harnarayan, C., 287
 Harrison, D.C., 240, 276
 Hashimoto, K., 9
 Haüsler, H., 159, 188
 Heier, G., 39
 Hellstrom, H.R., 148
 Henderson, A.H., 277
 Henney, R.P., 113
 Hensel, H., 171
 Henson, D., 110
 Henson, J.R., 110, 159
 Herd, J.A., 188, 196
 Herlihy, J.T., 70
 Herman, M.J., 278

- Herr, R.H., 276
 Heymann, M.A., 159
 Hildebrand, G., 171
 Hoffman, B.F., 70, 278
 Hoffman, J.I.E., 110, 111, 159
 Hogben, D., 70
 Hollenberg, M., 188, 196
 Holley, K.E., 112
 Holmsen, H., 53
 Holtz, J., 73-80, 79
 Honig, C.R., 55-71, 70, 71, 111, 159
 Horan, L.G., 148, 289
 Horn, H., 110
 Horwitz, L.D., 277
 Hottenrott, C., 112
 Howell, J.F., 260, 276
 Hudson, C.L., 139
 Hughes, J.L., 276
 Humphries, J.O., 240, 241
 Hunter, J.A., 110
 Hurley, E.J., 276
 Huth, G.C., 196

 Iben, A.B., 276
 Imai, S., 53
 Imperial, E.S., 159
 Iza, A.R., 191-196

 Jacob, M.I., 10
 Jacobs, J.J., 278
 Jageneau, A.H.M., 9, 160
 Janssen, P.A.J., 160
 Javid, H., 110
 Jesran, M.V., 148
 Jöbbsis, F., 71
 Johansson, B., 189
 Johnson, P.C., 71
 Johnson, W.D., 260, 276, 278, 289
 Johnston, F.D., 234
 Johnston, P.A., 196
 Jones, E.L., 188
 Jones, P.K., 11-26
 Jones, R.D., 189
 Jonsson, G., 79

 Jorgenson, C.R., 234
 Joseph, E.B., 26
 Jude, J.R., 276
 Juhran, W., 9
 Julian, O.C., 110

 Kadatz, R., 161-171
 Kaihara, S., 159
 Kaiser, G.A., 112, 278
 Kammermeier, H., 10
 Kampa, W.R., 112
 Karp, R.B., 112
 Kastor, J.A., 287
 Katori, M., 10, 25, 54,
 Kattus, A.A., 95-113, 219-234, 234
 Katz, A.M., 38
 Katz, L.N., 110
 Keefe, J.F., 119
 Keelan, M.H., 234
 Keller, N., 278
 Kelly, D.T., 115-119
 Kennamer, R., 234
 Kent, E.M., 147
 Khan, M.I., 148
 Khouri, E.M., 79, 80, 148, 188, 189, 190, 191-196, 195, 278, 288
 Killip, T., 288
 Kirk, E.S., 111, 159
 Kittle, C.F., 240
 Kjekshus, J.K., 113, 287
 Kline, S., 278
 Klionsky, B., 148
 Klocke, F.J., 289
 Klopp, E.H., 278
 Kloster, F.E., 278
 Knoebel, S.B., 278
 Kono, T., 38
 Kooros, M.A., 147
 Kopald, H.H., 188, 196
 Krause, E.G., 39
 Kremkau, E.L., 278
 Krogh, A., 71
 Kübler, A., 9, 54
 Kukovetz, W.R., 39
 Kuller, L., 234

- Kumakura, S., 9
- Lajos, T., 289
- Lange, R.L., 234
- Laurie, W., 234
- Lavelle, J.F., 288
- Leatherman, L.L., 261
- Leighninger, D.S., 139, 140, 195
- Leon, A.S., 188
- Leone, A., 147
- Lepage, G., 278
- Lepley, D., Jr., 260, 276, 277, 278, 289
- Lesperance, J., 277
- Levine, H.J., 119
- Levy, M.N., 26, 111, 159
- Lewi, P., 160
- Lewis, J.M., 260
- Libby, P., 287, 288
- Lichtlen, P.R., 189
- Lie, J.T., 112
- Liedtke, A.J., 277
- Lilienfeld, A., 234
- Lillehei, C.W., 288
- Linares, F., 26
- Linder, E., 189, 196
- Litvack, J., 171
- Locker, R.J., 196
- Love, W.B., 111
- Lowensohn, H.S., 79, 148, 188, 195, 288
- Lowry, O.H., 38
- Lübbbers, D.W., 171
- Luck, J.C., 111
- MacAlpin, R.N., 234
- Magovern, G.J., 147
- Maguire, M.H., 38
- Mahanti, B., 171
- Malloch, C.I., 287
- Malm, J.R., 278
- Maloney, J.V., 112
- Manion, W., 149
- Manley, J.C., 260, 276, 277, 278
- Marcruz, R., 26, 111
- Marcus, H.S., 240
- Markov, A., 148
- Marlon, A.M., 276, 277
- Maroko, P.R., 113, 287, 288
- Maron, B.J., 112
- Martz, M.N., 171
- Mason, D.T., 276, 277
- Massumi, R.A., 276
- Master, A.M., 110
- Matlof, J., 240
- Mautz, F.R., 133-140, 139, 140, 188
- McComb, R.B., 38
- McGranahan, G.M., 278
- McGregor, M., 111, 189, 195
- McHenry, P.L., 278
- McInnes, L., 171
- McLaughlin, V.W., 148, 289
- Meere, C., 278
- Menick, F.J., 190
- Menno, A.D., 112
- Mercier, C., 171
- Merendino, K.A., 240
- Merliss, R., 234
- Michie, D.D., 276
- Miller, R.R., 140, 276
- Mitchell, J.H., 26
- Mitchell, W.J., 188
- Miura, M., 9
- Moberg, C.H., 261
- Moir, T.W., 11-26
- Moller, J.H., 110
- Morales, A.R., 110
- Moritz, A.R., 139
- Morris, G.C., 260, 276
- Moss, A.J., 171
- Mulder, D.G., 112
- Müller, R.A., 80
- Murkawa, S., 171
- Murphy, R.A., 70
- Myers, W.W., 76, 111
- Nadeau, R., 79
- Najafi, H., 110
- Nakamura, K., 171
- Nakatsu, K., 38
- Nakeb, A., 110

- Nasser, M.G., 26
 Neill, W.A., 278
 Nelson, C.N., 70
 Ng, M.L., 26
 Noble, M.I.M., 110, 159
 Norton, J.M., 10
- O'Brien, G.S., 9
 Odoroff, C.L., 70
 Oldewurtel, H.A., 148
 Oldham, H.N., 277
 Oliva, P.B., 234
 Olsson, R.A., 27-39, 38, 41-54,
 54, 112
 Orgain, E.S., 139
 Oversohl, K., 79
 Ozawa, K., 171
- Page, E., 54
 Page, E.E., 260
 Page, D.L., 287
 Paglia, D.E., 112
 Palmowski, J., 151-160
 Parmerly, W.W., 240, 277
 Parratt, J.R., 171
 Pasyk, S., 79, 190, 195
 Patterson, J.L., 70
 Pauly, T.J., 9
 Peavy, S.T., 70
 Penna, M., 26
 Pentecost, B.L., 287
 Perna, A.M., 278
 Peterson, P.K., 260
 Phibbs, R.H., 110
 Phillips, J.F., 278
 Pifarre, R., 171
 Pitt, B., 115-119, 119, 159
 Pluss, R.G., 234
 Pöch, G., 39
 Pool, P.E., 26
 Potts, D.E., 234
 Pratt, F.H., 140
 Price, H.M., 38, 53
 Prinzmetal, M., 234
 Pritchard, W. H., 188
- Radice, F., 147
 Radowski, D., 26
 Rall, T.W., 39
 Randall, R.J., 38
 Rayford, C.R., 189, 288
 Redding, V.J., 189, 195
 Rees, J.R., 189, 195
 Regan, T.J., 148
 Reid, M.S., 234
 Rembert, J., 277
 Remensynder, J.P., 26
 Renkin, E.M., 71
 Restorff, W. v., 73-80, 79, 80
 Rethy, A., 39
 Reul, G.J., 260, 276
 Riley, A.L., 53
 Roberts, C., 140
 Roberts, J.T., 140
 Roberts, L.E., 159
 Roberts, W.C., 148
 Rochelle, D.G., 261
 Roe, B.B., 112
 Rona, G., 113
 Roseborough, N.J., 38
 Rosenfeldt, F., 277
 Ross, G., 111
 Ross, J., Jr., 112, 113, 277, 287,
 288
 Ross, J.M., 25, 70
 Ross, R.S., 189, 235-241, 240, 260
 Rostgaard, J., 38
 Roters, F.A., 288
 Roth, E.J., 189
 Roven, R.B., 113
 Rozenberg, M.C., 53
 Rubinson, R.M., 276
 Rubio, R., 3-10, 10, 25, 54, 69
 Rudolph, A.M., 159
 Rueger, R., 195
 Rümke, P.L., 38
- Sabiston, D.C., Jr., 263-278, 277
 Sachs, Ch., 79
 Sakamoto, J.R., 111
 Saltiel, J., 277
 Sanders, C.A., 287
 Sandiford, E.M., 249-261

- Sankerin, N.G., 288
Sarnoff, S.J., 26, 111
Sattin, A., 39
Saunders, K.B., 110, 159
Schaper, J., 38, 190
Schaper, W.K.A., 9, 38, 151-160,
160, 190
Schaumann, W., 9
Schenk, W.G., 112
Schimert, G.L., 289
Schmid, C., 147
Schrader, J., 10
Schuchhardt, S., 171
Scomazzoni, G., 147
Scott, J.B., 26
Seeman, T., 189, 196
Sham, G.B., 288
Sheldon, W.C., 260, 289
Shell, W.E., 287, 288
Shimizu, H., 39
Shirey, E.K., 260
Shumway, N.E., 240, 277
Silver, M.D., 234
Sissman, N.J., 112
Sloan, M., 240
Smith, S.C., 278
Snedecor, G.W., 54, 288
Snow, J.A., 38, 41-54, 190
Sobel, B.E., 113, 287, 288
Sobin, S.S., 71
Sobol, B.J., 26
Solomon, A.K., 53
Sones, F.M., Jr., 260, 261, 289
Sonnenblick, E.H., 112, 277
Spann, J.F., 277
Spieckermann, P.G., 9, 54
Stainsby, W.N., 26, 111
Starr, A., 276
Stary, H.C., 288
Stelzer, W.J., 276
Strandell, T., 190
Subijanto, S., 110, 159
Sullivan, J.M., 38
Sustaita, H., 240
Strom, G., 241
Swan, H.J.C., 240
Swartz, M.H., 38
Sybers, H.D., 287, 288
Szentvanyi, M., 189
Taber, R.E., 110
Tada, M., 38
Talner, N.S., 26
Tanemura, I., 9
Tarjan, E., 278
Taylor, W.J., 278
Tector, A.J., 276
Tennant, R., 139
Terneny, D.G., 261
Thoenen, H., 80
Thomas, G.I., 240
Thorburn, G.D., 188, 196
Thornton, J.J., 140
Tichy, V.L., 139
Titus, J.L., 112
Tomasí, V., 39
Tominaga, S., 9
Towers, B., 112
Townsend, R.S., 27-39
Tranzer, J.P., 80
Tredway, J.B., 113
Treistmann, B., 261
Tremmer, H.M., 71
Trendelenburg, C., 10
Tresch, D.D., 234
Treviscani, A., 39
Trimble, A.S. 234

Ueda, K., 189
Underhill, W.L., 113
Unkelness, J.C., 39
Urschel, C.W., 277

Van Gerven, W., 9
Varner, R.N., 70
Vassil, V.T., 112
Vendesteense, R., 190
Vincent, W.R., 111
Vineberg, A.M., 171
Vokonas, P.S., 140, 277
Voss, E.M., 9

Wada, T., 234

- Waldo, A.L., 278
Walker, J.R., 25, 70, 276
Wallace, A.G., 26
Wallach, D.F.A., 38
Wanloss, S.A., 26
Watanabe, T., 113, 287
Watt, D.C., 234
Wayland, H., 71
Wearn, J.T., 71
Webster, J.S., 261
Wechsler, A.S., 263-278, 277
Welch, G.H., Jr., 26, 111
Weldon, C.S., 243-247
Wexler, L., 240
White, F.C., 190, 288
Widnell, C.C., 39
Wiedmeier, V.T., 10
Wiggers, C.J., 139
Wilder, J., 71
Wilson, F.N., 234
Winbury, M.M., 110
Winters, W.L., 260
Wittenberg, S.M., 289
Wolk, M.J., 119
Wollenberger, A., 39
Woods, J.D., 234
Worden, R.E., 234
Wukasch, D.C., 249-261, 260
Wüsten, B., 151-160

Xhonneux, R., 160, 190

Young, G., 277

Zakheim, R., 189
Zelis, R., 276, 277
Zieske, H., 26, 159
Zimmer, H.G., 10

SUBJECT INDEX

- Acetylcholine
 - effect on
 - adenosine, 13, 21
 - coronary flow, 17, 18, 22
 - coronary metabolism, 15, 16, 21
 - myocardial O₂ consumption, 17, 18, 22
- Actomyosin
 - effect on ATP hydrolysis, 64
- Adenine nucleotide
 - heart content, 36
- Adenosine
 - effect of acetylcholine, 13, 21
 - nitroglycerine, 14, 21
 - oxygen, 12, 21
 - effect on coronary flow, 17, 18, 22, 41
 - coronary metabolism, 15, 61, 21
 - myocardial O₂ consumption, 17, 18, 22
 - hypothesis, 35
 - in hypoxia, 5, 6, 11
 - production, 27
 - role in coronary flow regulation, 27
 - synthesis, 7
- Angina, 219
 - EKG during, 220
 - Prinzmetal's variant, 219, 223
- Aortic stenosis
 - effect on DPTI, 98
- ATP hydrolysis
 - effect of actomyosin, 64
- Beta detector
 - collateral flow measurement, 191
- Capillary arrangement, 61
 - effect of O₂, 61
 - hypoxia, 62
- Capillary density
 - effect of O₂, 60
- Carbochromene
 - effect on coronary flow, 156
- Circulation - metabolism coupling, 63
- Coronary arteries
 - angiography, 219, 226-229
 - occlusion of, 219
 - spasm, 219, 221, 222
- Coronary artery
 - bypass surgery, 235, 236, 249
- Coronary artery bypass surgery, 249
 - associated conditions, 250
 - causes of death, 256, 257
 - complications, 254, 255
 - effect of catecholamines, 263, 271, 274
 - disease distribution, 244, 245,
 - hyperlipidemia, 246
 - left coronary obstruction, 246
 - pre-operative infarction, 258
 - ventricular function, 244, 245
 - effect on contractility, 263, 266-271
 - functional capacity, 237
 - incidence of infarction, 237
 - life expectancy, 238
 - symptoms, 236, 239
- followup, 254, 257
- graft patency, 254

- mortality, 251
 - effect of age, 253
 - sex, 253
- patient selection, 243
- postoperative results, 252
- surgical factors, 252
- Coronary artery reperfusion, 279
 - effect on coronary hemodynamics, 279, 282-284
 - infarct size, 285
 - reactive hyperemia, 281, 283, 284
- Coronary blood flow
 - effect of O₂ tension, 164
 - in ischemia, 161
- Coronary collateral circulation, 133, 141, 151, 192, 219
 - after coronary occlusion, 151, 155
 - development, 173
 - effect of excitement, 183
 - nitroglycerin, 191
 - flow distribution, 151, 153
 - hemodynamics, 173, 180
 - history, 133
 - indices
 - isotope clearance, 176
 - peripheral coronary pressure, 173
 - retrograde flow, 177
 - in myocardial infarction, 145
 - role in infarction, 229-231
 - sources, 152
- Coronary blood flow
 - after sympathectomy, 77
 - diastolic, 100
 - phasic, 99
 - regional, 99
 - regulation, 27, 41
- Coronary capillaries, 55
 - adaptation, 57
 - density, 58
 - intercapillary distance, 55, 56
 - effect of O₂, 60
 - pH, 67
 - recruitment, 58
 - oxygen gradients, 59
- Coronary capillary reserve, 57
 - role of O₂, 55, 58
- Coronary resistance
 - role of adenosine, 78, 11
 - oxygen, 7, 8, 11, 63
- Diastolic pressure time index (DPTI), 97
- Excitement
 - effect after sympathectomy, 77
 - on collateral circulation, 183
- Exercise
 - effect after sympathectomy, 74-76, 78
 - treadmill test, 220, 223, 224
- Hemodynamics
 - coronary
 - in sympathectomized dogs, 73
 - systemic
 - in sympathectomized dogs, 73
- Hydroxydomanine, 6
 - effect on hemodynamics, 74
 - coronary, 74
 - systemic, 74
- Hypoxanthine
 - arteriovenous difference, 47, 50
- Inosine
 - arteriovenous difference, 47, 50
- Intramyocardial pressure, 96
 - in ischemia, 115
 - regional changes
- Ischemia
 - myocardial
 - effect of hypertension, 105
- Isoproterenol
 - effect on DPTI, 98
 - subendocardial flow, 101
 - myocardial necrosis, 109
- Isotope clearance
 - collateral flow measurement, 176, 193
- Krogh equation, 58
- Microsphere (TM) method, 158

- Myocardial blood flow
 distribution, 153
 flow gradients
 determinants, 95, 96
 in ischemia, 155
 regional, 96, 99
- Myocardial infarction
 autopsy findings, 141
 mural thrombus in, 143
- Myocardial O₂ delivery, 102
- Myocardial "steal", 156
- Myocardial thermal conductivity, 164
- Myocardium
 adenine nucleotide maintenance
 6, 7
- Nitroglycerin
 effect on adenosine, 14, 21
 collateral circulation, 191, 194
 coronary flow, 17, 18, 22
 coronary metabolism, 15, 16, 21
 myocardial O₂ consumption, 17, 18, 22
- Nucleotidase, 5', 27
 assay, 29
 controlling factors, 28
 effect of divalent cations, 33
 phospholipase, 29, 32, 34
 preparation, 31
 properties, 31
- Nucleoside monophosphates
 hydrolysis by 5'-nucleotidase, 32
- Oxygen
 effect on
 adenosine, 12, 21
 coronary flow, 17, 18, 22
 coronary metabolism, 15, 16, 21
 myocardial contractility, 19
 myocardial O₂ consumption, 17, 18, 22, 23
 potassium extraction, 20, 22, 23
 sodium extraction, 20, 22, 23
- Oxygen diffusion, 55
 determinants of, 55
- Oxygen tension
 after vasodilators, 166-170
 effect on coronary flow, 164
 in myocardium, 161, 165, 166
 measurement of, 162
- Patent ductus arteriosus
 effect on DPTI, 98
- Peripheral coronary pressure, 173
 effect of coronary occlusion, 179
- Purine
 assay, 44
 concentration in blood, 41
 myocardium, 41
 in ischemic hearts
 blood levels, 46, 47
 myocardial levels, 46, 47
 in oxygenated hearts
 blood levels, 45
 myocardial levels, 45, 48
 myocardial: blood gradient, 42, 51
 myocardial: pericardial fluid gradient, 42, 49
- Reactive hyperemia
 after bypass surgery, 264
 in dogs, 267, 268, 270
 in humans, 269, 271
 effect of aminophylline, 4, 5
 dipyridamole, 3, 4
 lidoflazine, 3, 4,
 theophylline, 3, 4,
- Recruitment, 59
- Retrograde flow, 177
 effect of coronary occlusion, 177, 179
- Sarcolemma, cardiac
 purification, 32
- Subendocardium
 effect of ischemia, 95, 101, 103
 perfusion of, 96, 98, 103
 effect of diastolic pressure, 107
 tachycardia, 108

Sympathectomy

chemical, 73

effect on coronary hemodynamics, 73

systemic hemodynamics, 73

Tension-time index (TTI), 97