

INDEX OF AUTHORS

- Abe, A. S.** See JOHANSEN, ABE and ANDRESEN
- Abe, Augusto S. and Johansen, Kjell.** Gas exchange and ventilatory responses to hypoxia and hypercapnia in *Amphisbaena alba* (Reptilia: Amphisbaenia) 127, 159
- Abisgold, J. D. and Simpson, S. J.** The physiology of compensation by locusts for changes in dietary protein 129, 329
- Achituv, Yair.** See SUSSWEIN, ACHITUV, CAPPELL and BENNETT
- Adams, Brett A.** Thermal dependence of passive electrical properties of lizard muscle fibres 133, 169
- Agnisola, C.** See HOULIHAN, AGNISOLA, HAMILTON and TRARA GENOINO
- Aguayo, Albert J.** See BRAY, VILLEGAS-PÉREZ, VIDAL-SANZ and AGUAYO
- Ahearn, Gregory A. and Clay, Laurel P.** Membrane-potential-sensitive, Na^+ -independent lysine transport by lobster hepatopancreatic brush border membrane vesicles 127, 373
— $\text{Na}^+ \text{-Cl}^-$ -glutamate cotransport by lobster hepatopancreatic brush border membrane vesicles 130, 175
- Aldridge, H. D. J. N.** Turning flight of bats 128, 419
—Body accelerations during the wingbeat in six bat species: the function of the upstroke in thrust generation 130, 275
- Alerstam, Thomas.** Bird migration across a strong magnetic anomaly 130, 63
- Al-Shukur, Marwan.** See NOBLE-NESBITT and AL-SHUKUR
- Anapol, F. C. and Jungers, W. L.** Telemetered electromyography of the fast and slow extensors of the leg of the brown lemur (*Lemur fulvus*) 130, 341
- Anderson, A. E., Childress, J. J. and Favuzzi, J. A.** Net uptake of CO_2 driven by sulphide and thiosulphate oxidation in the bacterial symbiont-containing clam *Solemya reidi* 133, 1
- Anderson, Peter A. V.** Properties and pharmacology of a TTX-insensitive Na^+ current in neurones of the jellyfish *Cyanea capillata* 133, 231
- Anderson, Peter A. V. and McKay, M. Craig.** The electrophysiology of cnidocytes 133, 215
- Andresen, J. H.** See JOHANSEN, ABE and ANDRESEN
- Arp, Alissa J., Childress, James J. and Vetter, Russell D.** The sulphide-binding protein in the blood of the vestimentiferan tube-worm, *Riftia pachyptila*, is the extracellular haemoglobin 128, 139
- Ashford, M. L. J., Boden, P., Ramsey, R. L., Shinozaki, H. and Usherwood, P. N. R.** Effects of trimetaphan on locust muscle glutamate receptors 130, 405
- Baier, H.** See LUTCAVAGE, LUTZ and BAIER
- Baird, Troy A.** See GRAHAM, BAIRD and STÖCKMANN
- Balaban, Pavel M.** See IERUSALIMSKY and BALABAN
- Balice-Gordon, R. J.** See THOMPSON, SOILEAU, BALICE-GORDON and SUTTON
- Ballantyne, James S. and Moyes, Christopher D.** The role of divalent cations and ionic strength in the osmotic sensitivity of glutamate oxidation in oyster gill mitochondria 130, 203
—The effects of salinity acclimation on the osmotic properties of mitochondria from the gill of *Crassostrea virginica* 133, 449
- Barber, Andrew.** Intracellular free potassium, sodium and chloride measured with ion-selective microelectrodes from salivary gland cells of the snail *Planorbis corneus* 128, 349
- Barnhart, Christopher M. and McMahon, B. R.** Discontinuous carbon dioxide and metabolic depression in dormant land snails 128, 123

- Baudinette, R. V., Gannon, B. J., Runciman, W. B., Wells, S. and Love, J. B.** Do cardiorespiratory variables show entrainment with hopping in tammar wallabies? 129, 251
- Beadle, C. A.** See SHIMAHARA, PICHON, LEES, BEADLE and BEADLE
- Beadle, D. J.** See SHIMAHARA, PICHON, LEES, BEADLE and BEADLE
- Bennet-Clark, H. C.** The tuned singing burrow of mole crickets 128, 383
- Bennett, A. F.** See ELSE and BENNETT
- Bennett, Michael V. L.** See SUSSWEIN, ACHITUV, CAPPELL and MITCHELL
- Berschick, P., Bridges, C. R. and Grieshaber, M. K.** The influence of hyperoxia, hypoxia and temperature on the respiratory physiology of the intertidal rockpool fish *Gobius cobitis* Pallas 130, 369
- Bertram, J. E. A. and Gosline, J. M.** Functional design of horse hoof keratin: the modulation of mechanical properties through hydration effects 130, 121
- Bévengut, M.** See FRASER, BÉVENGUT and CLARAC
- Björklund, Anders.** See DUNNETT and BJÖRKLUND
- Blagburn, Jonathan M. and Sattelle, David B.** Presynaptic depolarization mediates presynaptic inhibition at a synapse between an identified mechanosensory neurone and giant interneurone 3 in the first instar cockroach, *Periplaneta americana* 127, 135
—Calcium conductance in an identified cholinergic synaptic terminal in the central nervous system of the cockroach 129, 347
- Blickhan, Reinhard and Full, Robert J.** Locomotion energetics of the ghost crab. II. Mechanics of the centre of mass during walking and running 130, 155
- Boden, P.** See ASHFORD, BODEN, RAMSEY, SHINOZAKI and USHERWOOD
- Bollenbacher, W. E., Granger, N. A., Katahira, E. J. and O'Brien, M. A.** Developmental endocrinology of larval moulting in the tobacco hornworm, *Manduca sexta* 128, 175
- Bollenbacher, Walter E.** See WATSON, WILLIAMS and BOLLENBACHER
- Boutilier, R. G., Glass, M. L. and Heisler, N.** Blood gases, and extracellular/intracellular acid-base status as a function of temperature in the anuran amphibians *Xenopus laevis* and *Bufo marinus* 130, 13
- Bradley, Timothy J.** See GARRETT and BRADLEY
—See also WRIGHT, SECOMB and BRADLEY
- Bray, Garth M., Villegas-Pérez, María Paz, Vidal-Sanz, Manuel and Aguayo, Albert J.** The use of peripheral nerve grafts to enhance neuronal survival, promote growth and permit terminal reconnections in the central nervous system of adult rats 132, 5
- Brezden, Borys L.** See SIGURDSON, MORRIS, BREZDEN and GARDNER
- Bridges, C. R.** See BERSCHICK, BRIDGES and GRIESHABER
—See also MORRIS, BRIDGES and GRIESHABER
- Brittain, T.** A possible role for protein dissociation in the functioning of embryonic haemoglobins 127, 443
- Brockes, Jeremy P.** The nerve dependence of amphibian limb regeneration 132, 79
- Brown, J. Anne and Green, Carol.** Single nephron function of the lesser spotted dogfish, *Scyliorhinus canicula*, and the effects of adrenaline 129, 265
- Bunge, Richard B.** Tissue culture observations relevant to the study of axon-Schwann cell interactions during peripheral nerve development and repair 132, 21
- Burggren, Warren W.** See McMAHON and BURGGREN
- Burkhardt, James.** See YEE, BURKHARDT and GILLY
- Bush, Brian M. H.** See SILLAR, CLARAC and BUSH
- Cameron, James N. and Iwama, George K.** Compensation of progressive hypercapnia in channel catfish and blue crabs 133, 183
- Canty, Andrea A. and Driedzic, William R.** Evidence that myoglobin does not support heart performance at maximal levels of oxygen demand 128, 469
- Cappell, Mitchell S.** See SUSSWEIN, ACHITUV, CAPPELL and BENNETT
- Carlsen, R. C.** See CURRIE and CARLSEN

- Casey, Timothy M. and Hegel-Little, Jeri R.** Instantaneous oxygen consumption and muscle stroke work in *Malacosoma americanum* during pre-flight warm-up 127, 389
- Childress, J. J.** See ANDERSON, CHILDRESS and FAVUZZI
- Childress, James J.** See ARP, CHILDRESS and VETTER
- Chiquet, Matthias and Nicholls, John G.** Neurite outgrowth and synapse formation by identified leech neurones in culture 132, 191
- Clarac, F.** See FRASER, BÉVENGUT and CLARAC
- Clarac, F., Libersat, F., Pflüger, H. J. and Rathmayer, W.** Motor pattern analysis in the shore crab (*Carcinus maenas*) walking freely in water and on land 133, 395
- Clarac, François.** See SILLAR, CLARAC and BUSH
- Clay, Laurel P.** See AHEARN and CLAY
- Coles, Roger B., Konishi, Masakazu and Pettigrew, John D.** Hearing and echolocation in the Australian grey swiftlet, *Collocalia spodiopygia* 129, 365
- Colmers, W.** See GOLDBERG, COLMERS, EDSTROM and LUKOWIAK
- Currie, S. N. and Carlsen, R. C.** Modulated vibration-sensitivity of lamprey Mauthner neurones 129, 41
- Functional significance and neural basis of larval lamprey startle behaviour 133, 121
- Delcomyn, Fred.** Motor activity during searching and walking movements of cockroach legs 133, 111
- Dickinson, Michael H.** See LENT and DICKINSON
- Djamgoz, M. B. A.** See HENDY and DJAMGOZ
- Dobson, G. P. and Hochachka, P. W.** Role of glycolysis in adenylate depletion and repletion during work and recovery in teleost white muscle 129, 125
- Doherty, John A. and Pires, Anthony.** A new microcomputer-based method for measuring walking phonotaxis in field crickets (*Gryllidae*) 130, 425
- Dormann, Ada.** See SPIRA, ZELDES, HOCHNER and DORMANN
- Driedzic, William R.** See CANTY and DRIEDZIC
- Dumont, J. P. C. and Wine, J. J.** The telson flexor neuromuscular system of the crayfish. I. Homology with the fast flexor system 127, 249
- The telson flexor neuromuscular system of the crayfish. II. Segment-specific differences in connectivity between premotor neurones and the motor giants 127, 279
- The telson flexor neuromuscular system of the crayfish. III. The role of feedforward inhibition in shaping a stereotyped behaviour pattern 127, 295
- Dunnett, Stephen B. and Björklund, Anders.** Mechanisms of function of neural grafts in the adult mammalian brain 132, 265
- Duthie, G. G.** See WELLS, DUTHIE, HOULIHAN, SMITH and WELLS
- Duthie, Garry G. and Hughes, George M.** The effects of reduced gill area and hyperoxia on the oxygen consumption and swimming speed of rainbow trout 127, 349
- Dyer, Fred C. and Seeley, Thomas D.** Interspecific comparisons of endothermy in honey-bees (*Apis*): deviations from the expected size-related patterns 127, 1
- Edgecomb, Robert S.** See SUDLOW, EDGECOMB and MURDOCK
- Edgecomb, Robert S., Murdock, Larry L., Smith, André B. and Stephen, Margaret D.** Regulation of tarsal taste threshold in the blowfly, *Phormia regina* 127, 79
- Edstrom, J.** See GOLDBERG, COLMERS, EDSTROM and LUKOWIAK
- El Haj, A. J. and Houlihan, D. F.** *In vitro* and *in vivo* protein synthesis rates in a crustacean muscle during the moult cycle 127, 413
- Ellory, J. C.** See GIBSON and ELLORY
—See also GIBSON, ELLORY and LAHLOU
- Ellory, J. C., Wolowyk, M. W. and Young, J. D.** Hagfish (*Eptatretus stoutii*) erythrocytes show minimal chloride transport activity 129, 377
- Else, P. L. and Bennett, A. F.** The thermal dependence of locomotor performance and muscle contractile function in the salamander *Ambystoma tigrinum nebulosum* 128, 219

- Elson, Robert C.** Integration of wing proprioceptive and descending exteroceptive sensory inputs by thoracic interneurones of the locust 128, 193
- Ennos, A. Roland.** A comparative study of the flight mechanism of Diptera 127, 355
- Evans, Peter D.** Phenylliminimidazolidine derivatives activate both OCTOPAMINE₁ and OCTOPAMINE₂ receptor subtypes in locust skeletal muscle 129, 239
- Farbridge, K. J. and Leatherland, J. F.** Lunar cycles of coho salmon, *Oncorhynchus kisutch*. I. Growth and feeding 129, 165
- Lunar cycles of coho salmon, *Oncorhynchus kisutch*. II. Scale amino acid uptake, nucleic acids, metabolic reserves and plasma thyroid hormones 129, 179
- Farrell, A. P.** Coronary flow in a perfused rainbow trout heart 129, 107
- Favuzzi, J. A.** See ANDERSON, CHILDRESS and FAVUZZI
- Febry, Ricardo and Lutz, Peter.** Energy partitioning in fish: the activity-related cost of osmoregulation in a euryhaline cichlid 128, 63
- Feldkamp, Steven D.** Swimming in the California sea lion: morphometrics, drag and energetics 131, 117
- ffrench-Constant, Charles.** See RAFF, FFRENCH-CONSTANT and MILLER
- Frain, W. J.** The effect of external sodium and potassium concentrations on sodium fluxes by salt-depleted and non-depleted minnows, *Phoxinus phoxinus* (L.) 131, 417.
- Fraser, K.** See HEITLER and FRASER
- Fraser, P. J., Bévengut, M. and Clarac, F.** Swimming patterns and the activity of identified equilibrium interneurones in the shore crab, *Carcinus maenas* 130, 305
- Full, Robert J.** Locomotion energetics of the ghost crab. I. Metabolic cost and endurance 130, 137
- See also BLICKHAN and FULL
- Furilla, R. A. and Jones, David R.** The relationship between dive and pre-dive heart rates in restrained and free dives by diving ducks 127, 333
- Furukawa, Yasuo and Kobayashi, Makoto.** Neural control of the heart beat in the African giant snail, *Achatina fulica* Féruccac. I. Identification of the heart regulatory neurones 129, 279
- Neural control of the heart beat in the African giant snail, *Achatina fulica* Féruccac. II. Interconnections among the heart regulatory neurones 129, 295
- Gabbott, Geoffrey R. J. and Jones, David R.** Habituation of the cardiac response to involuntary diving in diving and dabbling ducks 131, 403
- Gaertner M.** See LUEKEN, KRÜPPEL and GAERTNER
- Gannon, B. J.** See BAUDINETTE, GANNON, RUNCIMAN, WELLS and LOVE
- Gardner, David R.** See SIGURDSON, MORRIS, BREZDEN and GARDNER
- Garrett, Margaret A. and Bradley, Timothy J.** Extracellular accumulation of proline, serine and trehalose in the haemolymph of osmoconforming brackish-water mosquitoes 129, 231
- Gibson, J. S. and Ellory, J. C.** Intestinal salt absorption in the stenothermic Antarctic fish, *Notothenia rossii* 130, 437
- Gibson, J. S., Ellory, J. C. and Lahou, B.** Salinity acclimation and intestinal salt transport in the flounder: the role of the basolateral cell membrane 128, 371
- Gilly, W. F.** See YEE, BURKHARDT and GILLY
- Glass, M. L.** See BOUTILIER, GLASS and HEISLER
- Goldberg, J., Colmers, W., Edstrom, J. and Lukowiak, K.** Suppression of sensory to motor synaptic transmission and narrowing of the sensory neurone action potential by arginine vasotocin in *Aplysia californica* 128, 47
- Gosline, J. M.** See BERTRAM and GOSLINE
- Gosline, John M.** See SHADWICK, GOSLINE and MILSOM
- Götz, Karl G.** Course-control, metabolism and wing interference during ultralong tethered flight in *Drosophila melanogaster* 128, 35
- Graff, D.** See MCFARLANE, GRAFF and GRIMMELIKHUIZEN
- Graham, Jeffrey B., Baird, Troy A. and Stöckmann, Wieland.** The transition to air breathing in fishes. IV. Impact of branchial specializations for air breathing on the aquatic respiratory mechanisms and ventilatory costs of the swamp eel *Synbranchus marmoratus* 129, 83

- Graham, Jeffrey B., Lowell, William R., Rubinoff, Ira and Motta, Jorge.** Surface and subsurface swimming of the sea snake *Pelamis platurus* 127, 27
- Granger, N. A.** See BOLLENBACHER, GRANGER, KATAHIRA and O'BRIEN
- Green, Carol.** See BROWN and GREEN
- Greenberg, M. J.** See LEHMAN and GREENBERG
- Grieshaber, M. K.** See BERSCHICK, BRIDGES and GRIESHABER
—See also MORRIS, BRIDGES and GRIESHABER
- Grimmelikhuijzen, C. J. P.** See McFARLANE, GRAFF and GRIMMELIKHUIZEN
- Hadley, Neil F.** See TOOLSON and HADLEY
- Hainsworth, F. Reed.** Precision and dynamics of positioning by Canada geese flying in formation 128, 445
- Hamilton, N. M.** See HOULIHAN, AGNISOLA, HAMILTON and TRARA GENOINO
- Harrison, Jon M.** Roles of individual honeybee workers and drones in colonial thermogenesis 129, 53
- Hazel, Jeffrey R.** See SIDELL and JEFFREY
- Hazelton, Shelia R.** See SPRING and HAZELTON
- Hegel-Little, Jeri R.** See CASEY and HEGEL-LITTLE
- Heinrich, Bernd.** Thermoregulation by winter-flying endothermic moths 127, 313
—See also MORGAN and HEINRICH 133, 59
- Heisler, N.** See BOUTILIER, GLASS and HEISLER
—See also HICKS, ISHIMATSU and HEISLER
- Heitler, W. J. and Fraser, K.** Interactions of the giant fibres and motor giant neurones of the hermit crab 133, 353
- Hendy, C. H. and Djamgoz, M. B. A.** Potassium activity measurements in the micro-environment of the central nervous system of an insect 127, 211
- Henry, Raymond P.** See WHEATLY and HENRY
- Hertel, Horst and Maronde, Ulrike.** The physiology and morphology of centrally projecting visual interneurones in the honeybee brain 133, 301
- Hertel, Horst, Schäfer, Sabine and Maronde, Ulrike.** The physiology and morphology of visual commissures in the honeybee brain 133, 283
- Hetherington, Thomas E.** Physiological features of the opercularis muscle and their effects on vibration sensitivity in the bullfrog *Rana catesbeiana* 131, 189
- Heumann, Rolf.** Regulation of the synthesis of nerve growth factor 132, 133
- Hicks, James W., Ishimatsu, Atsushi and Heisler, Norbert.** Oxygen and carbon dioxide transport characteristics of the blood of the Nile monitor lizard (*Varanus niloticus*) 130, 27
- Hill, R. B.** See SMITH and HILL
- Hill, Robert B.** Correlation of electrical and mechanical activity of holothurian muscle 130, 331
- Höbe, Helve.** Sulphate entry into soft-water fish (*Salmo gairdneri*, *Catostomus commersoni*) during low ambient pH exposure 133, 87
- Hochachka, P. W.** See DOBSON and HOCHACHKA
- Hochner, Binyamin.** See SPIRA, ZELDES, HOCHNER and DORMANN
- Hopkins, Carl D.** See SCHLUGER and HOPKINS
- Houlihan, D. F.** See EL HAJ and HOULIHAN
—See also WELLS, DUTHIE, HOULIHAN, SMITH and WELLS
- Houlihan, D. F., Agnisola, C., Hamilton, N. M. and Trara Genoino, I.** Oxygen consumption of the isolated heart of *Octopus*: effects of power output and hypoxia 131, 137
- Howes, E. A.** See SMITH, HOWES and TREHERNE
- Hughes, George M.** See DUTHIE and HUGHES
- Hyde, D. A. and Perry, S. F.** Acid-base and ionic regulation in the American eel (*Anguilla rostrata*) during and after prolonged aerial exposure: branchial and renal adjustments 133, 429
- Ierusalimsky, Victor N. and Balaban, Pavel M.** Functioning of identified snail neurones in electric fields 131, 17
- Ingermann, Rolf L. and Virgin, Garth L.** Glycogen content and release of glucose from red blood cells of the sipunculan worm *Themiste dyscrita* 129, 141
- Ishimatsu, Atsushi.** See HICKS, ISHIMATSU and HEISLER
- Itoh, Hirokazu.** See NAKAOKA, KUROTANI and ITOH
- Iwama, George K.** See CAMERON and IWAMA

- Jensen, Frank B. and Weber, Roy E.** Internal hypoxia-hypercapnia in tench exposed to aluminium in acid water: effects on blood gas transport, acid-base status and electrolyte composition in arterial blood 127, 427
- Johansen, Jørgen and Kleinhaus, Anna L.** Saxitoxin differentiates between two types of Na^+ -dependent potentials in the Retzius cell of hirudinid leeches 131, 351
- Johansen, K., Abe, A. S. and Andresen, J. H.** Intracardiac shunting revealed by angiocardiology in the lizard *Tupinambis teguixin* 130, 1
- Johansen, Kjell.** See ABE and JOHANSEN
- Johnston, Ian A.** Respiratory characteristics of muscle fibres in a fish (*Chaenocephalus aceratus*) that lacks haem pigments 133, 415
—See also MUTUNGI and JOHNSTON
- Jones, David R.** See GABBOTT and JONES
—See also FURILLA and JONES
- Joos, Barbara.** Carbohydrate use in the flight muscles of *Manduca sexta* during pre-flight warm-up 133, 317
- Josephson, Robert K. and Stokes, Darrell R.** The contractile properties of a crab respiratory muscle 131, 265
- Jungers, W. L.** See ANAPOL and JUNGERS
- Kahan, Linda B.** See MOFFETT, YOX, KAHAN and RIDGWAY
- Kammer, Ann E.** See RHEUBEN and KAMMER
- Karlsen, Hans Erik and Sand, Olav.** Selective and reversible blocking of the lateral line in freshwater fish 133, 249
- Katahira, E. J.** See BOLLENBACHER, GRANGER, KATAHIRA and O'BRIEN
- Kavanagh, Mark W.** The efficiency of sound production in two cricket species, *Gryllotalpa australis* and *Teleogryllus commodus* (Orthoptera: Grylloidea) 130, 107
- Kerry, C. J., Ramsey, R. L., Sansom, M. S. P., Usherwood, P. N. R. and Washio, H.** Single-channel studies of the action of (+)-tubocurarine on locust muscle glutamate receptors 127, 121
- Kinugawa, Kohsaku.** See NAKAOKA, KINUGAWA and KUROTANI
- Kirshner, David S.** See WRIGHT and KIRSHNER
- Kleinhaus, Anna L.** See JOHANSEN and KLEINHAUS
- Kobayashi, Makoto.** See FURUKAWA and KOBAYASHI
- Koch, Alan and Moffett, David F.** Kinetics of extracellular solute movement in the isolated midgut of tobacco hornworm (*Manduca sexta*) 133, 199
- Koch, U. T.** See WEILAND and KOCH
- Koch, Uwe T.** See SCHÄFFNER and KOCH
- Konishi, Masakazu.** See COLES, KONISHI and PETTIGREW
- Kornhuber, M. E. and Walther, C.** The electrical constants of the fibres from two leg muscles of the locust *Schistocerca gregaria* 127, 173
- Kowalski, Ute and Wiltschko, Roswitha.** Pigeon homing: familiarity with the release site reduces the release site bias 133, 457
- Kramer, Bernd.** The sexually dimorphic jamming avoidance response in the electric fish *Eigenmannia* (Teleostei, Gymnotiformes) 130, 39
- Krüppel, T.** See LUEKEN, KRÜPPEL and GAERTNER
- Kuffler, Damien P.** Long-distance regulation of regenerating frog axons 132, 151
- Kurotani, Tohru.** See NAKAOKA, KINUGAWA and KUROTANI
—See also NAKAOKA, KUROTANI and ITOH
- Lahlou, B.** See GIBSON, ELLORY and LAHLOU
- Leatherland, J. F.** See FARBRIDGE and LEATHERLAND
- Lees, G.** See SHIMAHARA, PICHON, LEES, BEADLE and BEADLE
- Lehman, H. K. and Greenberg, M. J.** The actions of FMRFamide-like peptides on visceral and somatic muscles of the snail *Helix aspersa* 131, 55
- Lehman, H. K. and Price, D. A.** Localization of FMRFamide-like peptides in the snail *Helix aspersa* 131, 37
- Lent, Charles M. and Dickinson, Michael H.** On the termination of ingestive behaviour by the medicinal leech 131, 1
- Libersat, F.** See CLARAC, LIBERSAT, PFLÜGER and RATHMAYER
- Lieberman, Edward M.** See ORR and LIEBERMAN
- Lignon, J. M.** Ionic permeabilities of the isolated gill cuticle of the shore crab *Carcinus maenas* 131, 159
- Love, J. B.** See BAUDINETTE, GANNON, RUNCIMAN, WELLS and LOVE
- Lowell, William R.** See GRAHAM, LOWELL, RUBINOFF and MOTTA

- Lueken, W., Krüppel, T. and Gaertner, M.** Effects of raised $[K^+]$ _o and $[Ca^{2+}]_o$ on conjugation and on electrophysiological parameters in the marine ciliate *Euplotes vannus* 130, 193
- Lukowiak, K.** See GOLDBERG, COLMERS, EDSTROM and LUKOWIAK
- Lutcavage, M. E., Lutz, P. L. and Baier, H.** Gas exchange in the loggerhead sea turtle *Caretta caretta* 131, 365
- Lutz, P. L.** See LUTCAVAGE, LUTZ and BAIER
- Lutz, Peter.** See FEBRY and LUTZ
- McFarlane, I. D., Graff, D. and Grimmelikhuijzen, C. J. P.** Excitatory actions of Antho-RFamide, an anthozoan neuropeptide, on muscles and conducting systems in the sea anemone *Calliactis parasitica* 133, 157
- McGlade-McCulloh, E.** See MULLER, McGLADE-MCCULLOH and MASON
- McKay, M. Craig.** See ANDERSON and MCKAY
- McMahan, U. J.** See SMITH, YAO, REIST, MAGILL, WALLACE and McMAHAN
- McMahon, B. R.** See BARNHART and McMAHON
- McMahon, Brian R. and Burggren, Warren W.** Respiratory physiology of air breathing in the teleost fish *Misgurnus anguillicaudatus* 133, 371
- Magill, Catherine.** See SMITH, YAO, REIST, MAGILL, WALLACE and McMAHAN
- Marden, James H.** Maximum lift production during takeoff in flying animals 130, 235
- Maronde, Ulrike.** See HERTEL and MARONDE
—See also HERTEL, SCHÄFER and MARONDE
- Mason, A.** See MULLER, McGLADE-MCCULLOH and MASON
- Mense, D. C.** See TUFTS, MENSE and RANDALL
- Meyermann, R.** See WEKERLE, SUN, OROPEZA-WEKERLE and MEYERMANN
- Miller, Kirk, Packard, Gary C. and Packard, Mary J.** Hydric conditions during incubation influence locomotor performance of hatchling snapping turtles 127, 401
- Miller, Robert H.** See RAFF, FFRENCH-CONSTANT and MILLER
- Milligan, C. Louise and Wood, Chris M.** Regulation of blood oxygen transport and red cell pH after exhaustive activity in rainbow trout (*Salmo gairdneri*) and starry flounder (*Platichthys stellatus*) 133, 263
- Milsom, William K.** See SHADWICK, GOSLINE and MILSOM
- Misko, Thomas P., Radeke, Monte J. and Shooter, Eric M.** Nerve growth factor in neuronal development and maintenance 132, 177
- Mizunami, Makoto, Yamashita, Shigeki and Tateda, Hideki.** Calcium-dependent action potentials in the second-order neurones of cockroach ocelli 130, 259
- Moffett, David F.** See KOCH and MOFFETT
- Moffett, Stacia, Yox, Daniel P., Kahan, Linda B. and Ridgway, Richard L.** Innervation of the anterior and posterior levator muscles of the fifth leg of the crab *Carcinus maenas* 127, 229
- Morgan, Kenneth R.** Temperature regulation, energy metabolism and mate-searching in rain beetles (*Pleocoma* spp.) winter-active, endothermic scarabs (Coleoptera) 128, 107
- Morgan, Kenneth R. and Heinrich, Bernd.** Temperature regulation in bee- and wasp-mimicking syrphid flies 133, 59
- Morris, Catherine E.** See SIGURDSON, MORRIS, BREZDEN and GARDNER
- Morris, S., Bridges, C. R. and Grieshaber, M. K.** The regulation of haemocyanin oxygen affinity during emersion of the crayfish *Austropotamobius pallipes*. III. The dependence of Ca^{2+} -haemocyanin binding on the concentration of L-lactate 133, 339
- Motta, Jorge.** See GRAHAM, LOWELL, RUBINOFF and MOTTA
- Moyes, Christopher D.** See BALLANTYNE and MOYES
- Muller, K. J., McGlade-McCulloh, E. and Mason, A.** Tinkering with successful synapse regeneration in the leech: adding insult to injury 132, 207
- Murdock, Larry L.** See EDGECOMB, MURDOCK, SMITH and STEPHEN
—See also SUDLOW, EDGECOMB and MURDOCK
- Mushkot, Robert A.** See STIFFLER, RYAN and MUSHKOT

- Mutungi, Gabriel and Johnston, Ian A.** The effects of temperature and pH on the contractile properties of skinned muscle fibres from the terrapin, *Pseudemys scripta elegans* 128, 87
- Nakaoka, Yasuo, Kinugawa, Kohsaku and Kurotani, Tohru.** Ca²⁺-dependent photoreceptor potential in *Paramecium bursaria* 131, 107
- Nakaoka, Yasuo, Kurotani, Tohru and Itoh, Hirokazu.** Ionic mechanism of thermoreception in *Paramecium* 127, 95
- Neil, Douglas M.** See NEWLAND and NEIL
- Newland, Philip L. and Neil, Douglas M.** Statocyst control of uropod righting reactions in different planes of body tilt in the Norway lobster, *Nephrops norvegicus* 131, 301
- Nicholls, John G.** See CHIQUET and NICHOLLS
- Nikinmaa, M.** See TUFTS, NIKINMAA, STEFFENSEN and RANDALL
- Noble-Nesbitt, John and Al-Shukur, Marwan.** Effects of desiccation, water-stress and decapitation on integumentary water loss in the cockroach, *Periplaneta americana* 131, 289
- O'Brien, M. A.** See BOLLENBACHER, GRANGER, KATAHIRA and O'BRIEN
- Oropeza-Wekerle, R. L.** See WEKERLE, SUN, OROPEZA-WEKERLE and MEYERMANN
- Orr, Liston A. and Lieberman, Edward M.** Studies of the cardiac-like action potential in crayfish giant axons induced by platinized tungsten metal electrodes 128, 1
- Packard, Gary C.** See MILLER, PACKARD and PACKARD
- Packard, Mary J.** See MILLER, PACKARD and PACKARD
- Parnas, I.** Strengthening of synaptic inputs after elimination of a single neurone innervating the same target 132, 231
- Pennycuick, C. J.** Flight of auks (Alcidae) and other northern seabirds compared with southern Procellariiformes: ornithodolite observations 128, 335
- Perry, S. F.** See HYDE and PERRY
—See also VERMETTE and PERRY
- Perry, S. F. and Vermette, M. G.** The effects of prolonged epinephrine infusion on the physiology of the rainbow trout, *Salmo gairdneri*. I. Blood respiratory, acid-base and ionic states 128, 235
- Pettigrew, John D.** See COLES, KONISHI and PETTIGREW
- Pfau, Hans K.** Critical comments on a 'novel mechanical model of dipteran flight' (Miyan & Ewing, 1985) 128, 463
- Pflüger, H. J.** See CLARAC, LIBERSAT, PFLÜGER and RATHMAYER
- Phillips, John B.** Laboratory studies of homing orientation in the eastern red-spotted newt, *Notophthalmus viridescens* 131, 215
- Pichon, Y.** See SHIMAHARA, PICHON, LEES, BEADLE and BEADLE
- Pires, Anthony.** See DOHERTY and PIRES
- Pörtner, Hans-Otto.** Contributions of anaerobic metabolism to pH regulation in animal tissues: theory 131, 69
—Anaerobic metabolism and changes in the acid-base status: quantitative interrelationships and pH regulation in the marine worm *Sipunculus nudus* 131, 89
- Price, D. A.** See LEHMAN and PRICE
- Radeke, Monte J.** See MISKO, RADEKE and SHOOTER
- Raff, Martin C., ffrench-Constant, Charles and Miller, Robert H.** Glial cells in the rat optic nerve and some thoughts on remyelination in the mammalian CNS 132, 35
- Ramsey, R. L.** See ASHFORD, BODEN, RAMSEY, SHINOZAKI and USHERWOOD
—See also KERRY, RAMSEY, SANSON, USHERWOOD and WASHIO
- Randall, D. J.** See STEFFENSEN, TUFTS and RANDALL
—See also TUFTS, MENSE and RANDALL
—See also TUFTS, NIKINMAA, STEFFENSEN and RANDALL
- Rathmayer, W.** See CLARAC, LIBERSAT, PFLÜGER and RATHMAYER
- Rees, B. B. and Stephenson, D. G.** Thermal dependence of maximum Ca²⁺-activated force in skinned muscle fibres of the toad *Bufo marinus* acclimated at different temperatures 129, 309
- Reist, Noreen E.** See SMITH, YAO, REIST, MAGILL, WALLACE and McMAHAN

- Rheuben, Mary B. and Kammer, Ann E.** Structure and innervation of the third axillary muscle of *Manduca* relative to its role in turning flight 131, 373
- Riddiford, Lynn M.** See WOLFGANG and RIDDIFORD
- Ridgway, Richard L.** See MOFFETT, YOX, KAHAN and RIDGWAY
- Rubinoff, Ira.** See GRAHAM, LOWELL, RUBINOFF and MOTTA
- Runciman, W. B.** See BAUDINETTE, GANNON, RUNCIMAN, WELLS and LOVE
- Ryan, Sandra L.** See STIFFLER, RYAN and MUSHKOT
- Sand, Olav.** See KARLSEN and SAND
- Sansom, M. S. P.** See KERRY, RAMSEY, SANSON, USHERWOOD and WASHIO
- Sattelle, David B.** See BLAGBURN and SATTELLE
- Schäfer, Sabine.** See HERTEL, SCHÄFER and MARONDE
- Schäffner, Karl-Heinz and Koch, Uwe T.** A new field of wing campaniform sensilla essential for the production of the attractive calling song in crickets 129, 1
- Effects of wing campaniform sensilla lesions on stridulation in crickets 129, 25
- Schluger, James H. and Hopkins, Carl D.** Electric fish approach stationary signal sources by following electric current lines 130, 359
- Schmidt, J. M. and Smith, J. J. B.** Measurement of host curvature by the parasitoid wasp *Trichogramma minutum*, and its effect on host examination and progeny allocation 129, 151
- Sears, T. A.** Structural changes in intercostal motoneurones following axotomy 132, 93
- Secomb, Timothy W.** See WRIGHT, SECOMB and BRADLEY
- Seeley, Thomas D.** See DYER and SEELEY
- Shadwick, Robert E., Gosline, John M. and Milsom, William K.** Arterial haemodynamics in the cephalopod mollusc, *Octopus dofleini* 130, 87
- Shimahara, T., Pichon, Y., Lees, G., Beadle, C. A. and Beadle, D. J.** Gamma-aminobutyric acid receptors on cultured cockroach brain neurones 131, 231
- Shinozaki, H.** See ASHFORD, BODEN, RAMSEY, SHINOZAKI and USHERWOOD
- Shooter, Eric M.** See MISKO, RADEKE and SHOOTER
- Shultz, Jeffrey W.** Walking and surface film locomotion in terrestrial and semi-aquatic spiders 128, 427
- Sidell, Bruce D. and Hazel, Jeffrey R.** Temperature affects the diffusion of small molecules through cytosol of fish muscle 129, 191
- Sigurdson, Wade J., Morris, Catherine E., Brezden, Borys L. and Gardner, David R.** Stretch activation of a K^+ channel in molluscan heart cells 127, 191
- Sillar, Keith T., Clarac, François and Bush, Brian M. H.** Intersegmental coordination of central neural oscillators for rhythmic movements of the walking legs in crayfish, *Pacifastacus leniusculus* 131, 245
- Simpson, S. J.** See ABISGOLD and SIMPSON
- Smith, André B.** See EDGECOMB, MURDOCK, SMITH and STEPHEN
- Smith, J. J. B.** See SCHMIDT and SMITH
- Smith, Martin A., Yao, Yung-mae M., Reist, Noreen E., Magill, Catherine, Wallace, Bruce G. and McMahan, U. J.** Identification of agrin in electric organ extracts and localization of agrin-like molecules in muscle and central nervous system 132, 223
- Smith, P. J. S.** See WELLS, HOULIHAN, DUTHIE, SMITH and WELLS
- Smith, P. J. S. and Hill, R. B.** Modulation of output from an isolated gastropod heart: effects of acetylcholine and FMRFamide 127, 105
- Smith, P. J. S., Howes, E. A. and Treherne, J. E.** Mechanisms of glial regeneration in an insect central nervous system 132, 59
- Soileau, L. C.** See THOMPSON, SOILEAU, BALICE-GORDON and SUTTON
- Spedding, G. R.** The wake of a kestrel (*Falco tinnunculus*) in gliding flight 127, 45
- The wake of a kestrel (*Falco tinnunculus*) in flapping flight 127, 59
- Spira, Micha E., Zeldes, Daniel, Hochner, Binyamin and Dormann, Ada.** The effects of microenvironment on the redifferentiation of regenerating neurones: neurite architecture, acetylcholine receptors and Ca^{2+} channel distribution 132, 111

- Spring, Jeffrey H. and Hazelton, Shelia**
R. Excretion in the house cricket (*Acheta domesticus*): stimulation of diuresis by tissue homogenates 129, 63
- Steffensen, J. F.** See TUFTS, NIKINMAA, STEFFENSEN and RANDALL
- Steffensen, J. F., Tufts, B. L. and Randall, D. J.** Effect of burst swimming and adrenaline infusion on O₂ consumption and CO₂ excretion in rainbow trout, *Salmo gairdneri* 131, 427
- Stephen, Margaret D.** See EDGECOMB, MURDOCK, SMITH and STEPHEN
- Stephenson, D. G.** See REES and STEPHENSON
- Stiffler, Daniel F., Ryan, Sandra L. and Mushkot, Robert A.** Interactions between acid-base balance and cutaneous ion transport in larval *Ambystoma tigrinum* (Amphibia: Caudata) in response to hypercapnia 130, 389
- Stockmann, Wieland.** See GRAHAM, BAIRD and STÖCKMANN
- Stokes, Darrell R.** See JOSEPHSON and STOKES
- Straka, H.** See ZETTLER and STRAKA
- Sudlow, Leland C., Edgecomb, Robert S. and Murdock, Larry L.** Regulation of labellar and tarsal taste thresholds in the black blowfly, *Phormia regina* 130, 219
- Sun, D.** See WEKERLE, SUN, OROPEZA-WEKERLE and MEYERMANN
- Susswein, Abraham J., Achituv, Yair, Cappell, Mitchell S. and Bennett, Michael V. L.** Pharyngeal movements during feeding sequences of *Navanax inermis* (Gastropoda: Opisthobranchia) in successive stages of dissection 128, 323
- Sutton, L. A.** See THOMPSON, SOILEAU, BALICE-GORDON and SUTTON
- Takahata, Masakazu and Wine, Jeffrey J.** A local interneurone which receives differential input from the medial and lateral giant axons 129, 385
- Tateda, Hideki.** See MIZUNAMI, YAMASHITA and TATEDA
- Taylor, E. W., Tyler-Jones, R. and Wheately, M. G.** The effects of aerial exposure on the distribution of body water and ions in the freshwater crayfish *Austropotamobius pallipes* (Lereboullet) 128, 307
- Taylor, Victoria A.** See YOUNG and TAYLOR
- Thompson, W. J., Soileau, L. C., Balice-Gordon, R. J. and Sutton, L. A.** Selective innervation of types of fibres in developing rat muscle 132, 249
- Toh, Yoshihiro.** See YAMANA and TOH
- Toolson, Eric C. and Hadley, Neil F.** Energy-dependent facilitation of transcuticular water flux contributes to evaporative cooling in the Sonoran desert cicada, *Diceroprocta apache* (Homoptera: Cicadidae) 131, 439
- Trara Genoino, I.** See HOULIHAN, AGNISOLA, HAMILTON and TRARA GENINO
- Treherne, J. E.** See SMITH, HOWES and TREHERNE
- Tucker, Vance A.** Gliding birds: the effect of variable wing span 133, 33
- Tufts, B. L.** See STEFFENSEN, TUFTS and RANDALL
- Tufts, B. L., Mense, D. C. and Randall, D. J.** The effects of forced activity on circulating catecholamines and pH and water content of erythrocytes in the toad 128, 411
- Tufts, B. L., Nikinmaa, M., Steffensen, J. F. and Randall, D. J.** Ion exchange mechanisms on the erythrocyte membrane of the aquatic salamander, *Amphiuma tridactylum* 133, 329
- Tyler-Jones, R.** See TAYLOR, TYLER-JONES and WHEATLEY
- Usherwood, P. N. R.** See ASHFORD, BODEN, RAMSEY, SHINOZAKI and USHERWOOD
—See also KERRY, RAMSEY, SANSON, USHERWOOD and WASHIO
- Vermette, M. G.** See PERRY and VERMETTE

- Vermette, M. G. and Perry, S. F.** The effects of prolonged epinephrine infusion on the physiology of the rainbow trout, *Salmo gairdneri*. II. Branchial solute fluxes 128, 255
- The effects of prolonged epinephrine infusion on the physiology of the rainbow trout, *Salmo gairdneri*. III. Renal ionic fluxes 128, 269
- Vetter, Russell D.** See ARP, CHILDRESS and VETTER
- Vidal-Sanz, Manuel.** See BRAY, VILLEGRAS-PÉREZ, VIDAL-SANZ and AGUAYO
- Villegas-Pérez, María Paz.** See BRAY, VILLEGRAS-PÉREZ, VIDAL-SANZ and AGUAYO
- Virgin, Garth L.** See INGERMANN and VIRGIN
- Wallace, Bruce G.** See SMITH, YAO, REIST, MAGILL, WALLACE and McMAHAN
- Walsh, Patrick J.** Lactate uptake by toadfish hepatocytes: passive diffusion is sufficient 130, 295
- Walther, C.** See KORNHUBER and WALTHER
- Washio, H.** See KERRY, RAMSEY, SANSON, USHERWOOD and WASHIO
- Watson, R. Douglas, Williams, Tammy K. and Bollenbacher, Walter E.** Regulation of ecdysone biosynthesis in the tobacco hornworm, *Manduca sexta*: titre of the haemolymph stimulatory factor during the last larval instar 128, 159
- Weber, Roy E.** See JENSEN and WEBER
- Weiland, G. and Koch, U. T.** Sensory feedback during active movements of stick insects 133, 137
- Wekerle, H., Sun, D., Oropenza-Wekerle, R. L. and Meyermann, R.** Immune reactivity in the nervous system: modulation of T-lymphocyte activation of glial cells 132, 43
- Wells, J.** See WELLS, DUTHIE, HOULIHAN, SMITH and WELLS
- Wells, M. J., Duthie, G. G., Houlihan, D. F., Smith, P. J. S. and Wells, J.** Blood flow and pressure changes in exercising octopuses (*Octopus vulgaris*) 131, 175
- Wells, S.** See BAUDINETTE, GANNON, RUNCIMAN, WELLS and LOVE
- Wenning, Angela.** Salt and water regulation in *Macrobdella decora* (Hirudinea: Gnathobdelliformes) under osmotic stress 131, 337
- Westerfield, Monte.** Substrate interactions affecting motor growth cone guidance during development and regeneration 132, 161
- Wheatley, M. G.** See TAYLOR, TYLER-JONES and WHEATLY
- Wheatley, Michèle G. and Henry, Raymond P.** Branchial and antennal gland Na^+/K^+ -dependent ATPase and carbonic anhydrase activity during salinity acclimation of the euryhaline crayfish *Pacifastacus leniusculus* 133, 73
- Wigglesworth, V. B.** How does a fly cling to the under surface of a glass sheet? 129, 373
- Williams, Tammy K.** See WATSON, WILLIAMS and BOLLENBACHER
- Wiltschko, Roswitha.** See KOWALSKI and WILTSCHKO
- Wine, J. J.** See DUMONT and WINE
- Wine, Jeffrey J.** See TAKAHATA and WINE
- Wolfgang, William J. and Riddiford, Lynn M.** Cuticular mechanics during larval development of the tobacco hornworm, *Manduca sexta* 128, 19
- Wolowyk, M. W.** See ELLORY, WOLOWYK and YOUNG
- Wood, Chris M.** See MILLIGAN and WOOD
- Wright, Jonathan C. and Kirshner, David S.** Allometry of lung volume during voluntary submergence in the saltwater crocodile *Crocodylus porosus* 130, 433
- Wright, Stephen H., Secomb, Timothy W. and Bradley, Timothy J.** Apical membrane permeability of *Mytilus* gill: influence of ultrastructure, salinity and competitive inhibitors on amino acid fluxes 129, 205

Yamana, Kenjiro and Toh, Yoshihiro.

Intracellular recording from receptor cells of the temporal organ of the Japanese house centipede, *Thereuonema hilgendorfi*: receptor potential and conductance changes 131, 205

Yamashita, Shigeki. See MIZUNAMI, YAMASHITA and TATEDA**Yao, Yung-mae M.** See SMITH, YAO, REIST, MAGILL, WALLACE and McMAHAN**Yee, Audrey, Burkhardt, James and Gilly, W. F.** Mobilization of a coordinated escape response by giant axons in the ophiuroid, *Ophiopterus papillosa* 128, 287**Young, J. D.** See ELLORY, WOLOWYK and YOUNG**Young, Stephen and Taylor, Victoria A.**

Spontaneous and evoked eye movements in *Polyphemus pediculus* (Cladocera: Crustacea): a case of open-loop tracking? 131, 323

Yox, Daniel P. See MOFFETT, YOX, KAHAN and RIDGWAY**Zeldes, Daniel.** See SPIRA, ZELDES, HOCHNER and DORMANN

Zettler, F. and Straka, H. Synaptic chloride channels generating hyperpolarizing on-responses in monopolar neurones of the blowfly visual system 131, 435