

The Journal of Neuroscience

The Official Journal of
the Society for Neuroscience

November 1989
Volume 9 Number 11

- 3699 Herve, D., F. Trovero, G. Blanc, A.M. Thierry, J. Glowinski, and J.P. Tassin: Nondopaminergic Prefrontocortical Efferent Fibers Modulate D1 Receptor Denervation Supersensitivity in Specific Regions of the Rat Striatum
- 3709 Schiller, Y., and R. Rahamimoff: Neuromuscular Transmission in Diabetes: Response to High-Frequency Activation
- 3720 Malgouris, C., F. Bardot, M. Daniel, F. Pellis, J. Rataud, A. Uzan, J.-C. Blanchard, and P.M. Laduron: Riluzole, a Novel Antigliutamate, Prevents Memory Loss and Hippocampal Neuronal Damage in Ischemic Gerbils
- 3728 Mattson, M.P., M. Murrain, P.B. Guthrie, and S.B. Kater: Fibroblast Growth Factor and Glutamate: Opposing Roles in the Generation and Degeneration of Hippocampal Neuroarchitecture
- 3741 Malach, R.: Patterns of Connections in Rat Visual Cortex
- 3753 Van Hooff, C.O.M., P.N.E. De Graan, A.B. Oestreicher, and W.H. Gispen: Muscarinic Receptor Activation Stimulates B-50/GAP43 Phosphorylation in Isolated Nerve Growth Cones
- 3760 Brown, V.J., and T.W. Robbins: Elementary Processes of Response Selection Mediated by Distinct Regions of the Striatum
- 3766 Oblinger, M.M., J. Wong, and L.M. Parysek: Axotomy-Induced Changes in the Expression of a Type III Neuronal Intermediate Filament Gene
- 3776 Nakamura, H., and D.D.M. O'Leary: Inaccuracies in Initial Growth and Arborization of Chick Retinotectal Axons Followed by Course Corrections and Axon Remodeling to Develop Topographic Order
- 3796 Kashihara, Y., M. Sakaguchi, and M. Kuno: Axonal Transport and Distribution of Endogenous Calcitonin Gene-Related Peptide in Rat Peripheral Nerve
- 3803 Oleskevich, S., L. Descarries, and J.-C. Lacaille: Quantified Distribution of the Noradrenaline Innervation in the Hippocampus of Adult Rat

Cover Picture: *Anisodoris nobilis*, the Sea Lemon, photographed near Point Lobos, California. The ganglia of marine nudibranchs such as *Anisodoris nobilis* and *Archidoris montereyensis* contain easily identifiable giant neurons, thereby facilitating comparative studies of the membrane properties of different cell types. Characteristics of the fast transient outward current, A-current, were examined in isolated somata with a 2 microelectrode voltage clamp. A-current magnitude, density and inactivation kinetics were shown to differ significantly between identified neurons. Photograph courtesy of L. and L. Langstroth and submitted by the authors E. E. Serrano and P. A. Getting (pp. 4021–4032, this issue).

- 3816 Zupanc, G.K.H., and W. Heiligenberg: Sexual Maturity-Dependent Changes in Neuronal Morphology in the Prepacemaker Nucleus of Adult Weakly Electric Knifefish, *Eigenmannia*
- 3828 Hausen, K., and C. Wehrhahn: Neural Circuits Mediating Visual Flight Control in Flies: I. Quantitative Comparison of Neural and Behavioral Response Characteristics
- 3837 Scherer, W.J., and S.B. Udin: *N*-Methyl-D-Aspartate Antagonists Prevent Interaction of Binocular Maps in *Xenopus* Tectum
- 3844 Koenig, J.H., and K. Ikeda: Disappearance and Reformation of Synaptic Vesicle Membrane Upon Transmitter Release Observed Under Reversible Blockage of Membrane Retrieval
- 3861 Gorgels, T.G.M.F., M. Van Lookeren Campagne, A.B. Oestreicher, A.A.M. Gribnau, and W.H. Gispen: B-50/GAP43 Is Localized at the Cytoplasmic Side of the Plasma Membrane in Developing and Adult Rat Pyramidal Tract
- 3870 Olsson, T., K. Kristensson, Å. Ljungdahl, J. Maehlen, R. Holmdahl, and L. Klareskog: Gamma-Interferon-like Immunoreactivity in Axotomized Rat Motor Neurons
- 3876 Corkin, S., T.J. Rosen, E.V. Sullivan, and R.A. Clegg: Penetrating Head Injury in Young Adulthood Exacerbates Cognitive Decline in Later Years
- 3884 Hevner, R.F., and M.T.T. Wong-Riley: Brain Cytochrome Oxidase: Purification, Antibody Production, and Immunohistochemical/Histochemical Correlations in the CNS
- 3899 McEachern, A.E., M.H. Jacob, and D.K. Berg: Differential Effects of Nerve Transection on the ACh and GABA Receptors of Chick Ciliary Ganglion Neurons
- 3908 Yu, W.-h.A.: Administration of Testosterone Attenuates Neuronal Loss Following Axotomy in the Brain-Stem Motor Nuclei of Female Rats
- 3915 Mizumori, S.J.Y., B.L. McNaughton, C.A. Barnes, and K.B. Fox: Preserved Spatial Coding in Hippocampal CA1 Pyramidal Cells During Reversible Suppression of CA3c Output: Evidence for Pattern Completion in Hippocampus
- 3929 Ragenbass, M., E. Tribollet, M. Dubois-Dauphin, and J.J. Dreifuss: Vasopressin Receptors of the Vasopressor (V_1) Type in the Nucleus of the Solitary Tract of the Rat Mediate Direct Neuronal Excitation
- 3937 Lupa, M.T., and Z.W. Hall: Progressive Restriction of Synaptic Vesicle Protein to the Nerve Terminal During Development of the Neuromuscular Junction
- 3946 Sandberg, K., C.J. Berry, E. Eugster, and T.B. Rogers: A Role for cGMP During Tetanus Toxin Blockade of Acetylcholine Release in the Rat Pheochromocytoma (PC12) Cell Line
- 3955 Dubinsky, J.M.: Development of Inhibitory Synapses Among Striatal Neurons *in vitro*
- 3966 Urban, L., K.H. Neill, B.J. Crain, J.V. Nadler, and G.G. Somjen: Postischemic Synaptic Physiology in Area CA1 of the Gerbil Hippocampus Studied *in vitro*
- 3976 Garber, S.S., T. Hoshi, and R.W. Aldrich: Regulation of Ionic Currents in Pheochromocytoma Cells by Nerve Growth Factor and Dexamethasone
- 3988 Hacohen, N., J.A. Assad, W.J. Smith, and D.P. Corey: Regulation of Tension on Hair-Cell Transduction Channels: Displacement and Calcium Dependence
- 3998 Sullivan, R.M., D.A. Wilson, and M. Leon: Norepinephrine and Learning-Induced Plasticity in Infant Rat Olfactory System

- 4007 Silver, R.A., A.G. Lamb, and S.R. Bolsover: Elevated Cytosolic Calcium in the Growth Cone Inhibits Neurite Elongation in Neuroblastoma Cells: Correlation of Behavioral States with Cytosolic Calcium Concentration
- 4021 Serrano, E.E., and P.A. Getting: Diversity of the Transient Outward Potassium Current in Somata of Identified Molluscan Neurons
- 4033 Brown, L.L., and J.F. Lorden: Regional Cerebral Glucose Utilization Reveals Widespread Abnormalities in the Motor System of the Rat Mutant *dystonic*
- 4042 Carter, D.A., G.M. Bray, and A.J. Aguayo: Regenerated Retinal Ganglion Cell Axons Can Form Well-Differentiated Synapses in the Superior Colliculus of Adult Hamsters
- 4051 French-Mullen, J.M.H., and M.A. Rogawski: Interaction of Phencyclidine with Voltage-Dependent Potassium Channels in Cultured Rat Hippocampal Neurons: Comparison with Block of the NMDA Receptor-Ionophore Complex
- 4062 Abercrombie, E.D., and M.J. Zigmond: Partial Injury to Central Noradrenergic Neurons: Reduction of Tissue Norepinephrine Content Is Greater Than Reduction of Extracellular Norepinephrine Measured by Microdialysis
- 4068 Parker, I., and R. Miledi: Nonlinearity and Facilitation in Phosphoinositide Signaling Studied by the Use of Caged Inositol Trisphosphate in *Xenopus* Oocytes
- 4078 Koester, J., and A. Alevizos: Innervation of the Kidney of *Aplysia* by L10, the LUQ Cells, and an Identified Peripheral Motoneuron
- 4089 Premack, B.A., S. Thompson, and J. Coombs-Hahn: Clustered Distribution and Variability in Kinetics of Transient K Channels in Molluscan Neuron Cell Bodies

Persons interested in becoming members of the Society for Neuroscience should address inquiries to the Society for Neuroscience, Suite 500, 11 Dupont Circle, N.W., Washington, D.C. 20036; (202) 462-6688.

Instructions to Authors appear in the January issue only. Copies of the Instructions can be obtained by writing the *Journal of Neuroscience*, Washington University School of Medicine, Box 8108, 660 S. Euclid Ave., St. Louis, MO 63110. Inquiries concerning manuscripts can be made directly to Barbara Harris, editorial assistant, at the offices of the Journal (314-362-3663; FAX 314-362-9862).

The Journal of Neuroscience (ISSN 0270-6474) is the official journal of the Society for Neuroscience. It is published monthly for the Society, one volume a year, by Oxford University Press, 200 Madison Avenue, New York, NY 10016.

Subscriptions are on a per-volume basis beginning with the January issue. The volume 9 (1989) rate for the U.S. is \$475. Outside the U.S. add \$75; for air-expedited delivery add an additional \$55. Single copies are \$42. Reduced rates are available for members of the Society of Neuroscience. Address subscription and back issue requests to the Journals Department, Oxford University Press, 16-00 Pollitt Drive, Fair Lawn, NJ 07410.

Change of Address notifications must be sent to Oxford's Journals Department at least 60 days in advance. Journals undeliverable because of incorrect addresses will be destroyed. Duplicates can be obtained (if available) from Oxford at the regular price of single issues.

Advertising inquiries should be addressed to Donald Pfarr, Williams & Wilkins, 428 E. Preston Street, Baltimore, MD 21202, telephone 301-528-4000.

Microfilm and microfiche inquiries should be directed to University Microfilms Inc., 300 North Zeeb Road, Ann Arbor, MI 48106.

Reprints of individual articles are available only from the authors.

Japanese yen price is available from our agent: Kinokuniya Publications Co., Ltd., Journals Department, P.O. Box 55 Chitose, Tokyo 156, Japan.

Postmaster: Second class postage paid at Washington, DC, and at additional mailing offices; send address changes to the Journals Department, Oxford University Press, 16-00 Pollitt Drive, Fair Lawn, NJ 07410.

The Journal of Neuroscience is indexed by *Chemical Abstracts*, *Current Contents*, *Excerpta Medica*, *Index Medicus*, and *Index to Scientific Reviews*.

The journal is printed on acid-free paper.

Copyright © 1989 Society for Neuroscience. All rights reserved.