

The Journal of Neuroscience

The Official Journal of
the Society for Neuroscience

October 1987
Volume 7 Number 10

- 2991 Gonzalez, M.F., and F.R. Sharp: Fetal Frontal Cortex Transplanted to Injured Motor/Sensory Cortex of Adult Rats. I. NADPH-Diaphorase Neurons
- 3002 Sharp, F.R., M.F. Gonzalez, and S.M. Sagar: Fetal Frontal Cortex Transplanted to Injured Motor/Sensory Cortex of Adult Rats. II. VIP-, Somatostatin-, and NPY-Immunoreactive Neurons
- 3016 McLean, J.H., and M.T. Shipley: Serotonergic Afferents to the Rat Olfactory Bulb: I. Origins and Laminar Specificity of Serotonergic Inputs in the Adult Rat
- 3029 McLean, J.H., and M.T. Shipley: Serotonergic Afferents to the Rat Olfactory Bulb: II. Changes in Fiber Distribution During Development
- 3040 Segraves, M.A., M.E. Goldberg, S.-y. Deng, C.J. Bruce, L.G. Ungerleider, and M. Mishkin: The Role of Striate Cortex in the Guidance of Eye Movements in the Monkey
- 3059 Lewis, J.A., J.S. Elmer, J. Skimming, S. McLafferty, J. Fleming, and T. McGee: Cholinergic Receptor Mutants of the Nematode *Caenorhabditis elegans*
- 3072 Hestrin, S., and J.I. Korenbrot: Voltage-Activated Potassium Channels in the Plasma Membrane of Rod Outer Segments: A Possible Effect of Enzymatic Cell Dissociation
- 3081 Skelton, R.W., A.S. Scarth, D.M. Wilkie, J.J. Miller, and A.G. Phillips: Long-Term Increases in Dentate Granule Cell Responsivity Accompany Operant Conditioning
- 3088 Schaffner, A.E., P.A. St. John, and J.L. Barker: Fluorescence-Activated Cell Sorting of Embryonic Mouse and Rat Motoneurons and Their Long-Term Survival *in vitro*
- 3105 Wagner, H., T. Takahashi, and M. Konishi: Representation of Interaural Time Difference in the Central Nucleus of the Barn Owl's Inferior Colliculus
- 3117 Morris, J.L., and I.L. Gibbins: Neuronal Colocalization of Peptides, Catecholamines, and Catecholamine-Synthesizing Enzymes in Guinea Pig Paracervical Ganglia
- 3131 Kobayashi, T., V. Askanas, and W.K. Engel: Human Muscle Cultured in Monolayer and Cocultured with Fetal Rat Spinal Cord: Importance of Dorsal Root Ganglia for Achieving Successful Functional Innervation
- 3142 Kosik, K.S., and E.A. Finch: MAP2 and Tau Segregate into Dendritic and Axonal Domains After the Elaboration of Morphologically Distinct Neurites: An Immunocytochemical Study of Cultured Rat Cerebrum

Cover picture: Orthogonal scaffold of longitudinal and commissural axon fascicles in a single segment of the developing central nervous system of the grasshopper embryo at 40% of development (courtesy of Michael Bastiani, Corey Goodman, and colleagues).

- 3154 Wilson, D.A., R.M. Sullivan, and M. Leon: Single-Unit Analysis of Postnatal Olfactory Learning: Modified Olfactory Bulb Output Response Patterns to Learned Attractive Odors
- 3163 Chamak, B., A. Fellous, J. Glowinski, and A. Prochiantz: MAP2 Expression and Neuritic Outgrowth and Branching Are Coregulated Through Region-Specific Neuro-Astroglial Interactions
- 3171 Milner, T.A., C. Aoki, K.-F.R. Sheu, J.P. Blass, and V.M. Pickel: Light Microscopic Immunocytochemical Localization of Pyruvate Dehydrogenase Complex in Rat Brain: Topographical Distribution and Relation to Cholinergic and Catecholaminergic Nuclei
- 3191 Tobias, M.L., and D.B. Kelley: Vocalizations by a Sexually Dimorphic Isolated Larynx: Peripheral Constraints on Behavioral Expression
- 3198 Sassoon, D.A., G.E. Gray, and D.B. Kelley: Androgen Regulation of Muscle Fiber Type in the Sexually Dimorphic Larynx of *Xenopus laevis*
- 3207 Treistman, S.N., and A. Wilson: Effects of Ethanol on Early Potassium Currents in *Aplysia*: Cell Specificity and Influence of Channel State
- 3215 Meredith, M.A., J.W. Nemitz, and B.E. Stein: Determinants of Multisensory Integration in Superior Colliculus Neurons. I. Temporal Factors
- 3230 Mayer, M.L., A.B. MacDermott, G.L. Westbrook, S.J. Smith, and J.L. Barker: Agonist- and Voltage-Gated Calcium Entry in Cultured Mouse Spinal Cord Neurons Under Voltage Clamp Measured Using Arsenazo III
- 3245 Kim, Y.-T., and C.-F. Wu: Reversible Blockage of Neurite Development and Growth Cone Formation in Neuronal Cultures of a Temperature-Sensitive Mutant of *Drosophila*
- 3256 O'Donovan, M.J., and L. Landmesser: The Development of Hindlimb Motor Activity Studied in the Isolated Spinal Cord of the Chick Embryo
- 3265 Harada, Y., T. Takahashi, M. Kuno, K. Nakayama, Y. Masu, and S. Nakanishi: Expression of Two Different Tachykinin Receptors in *Xenopus* Oocytes by Exogenous mRNAs
- 3274 Forehand, C.J.: Ultrastructural Analysis of the Distribution of Synaptic Boutons from Labeled Preganglionic Axons on Rabbit Ciliary Neurons
- 3282 Burrows, M.: Inhibitory Interactions Between Spiking and Nonspiking Local Interneurons in the Locust
- 3293 Tao-Cheng, J.-H., Z. Nagy, and M.W. Brightman: Tight Junctions of Brain Endothelium *in vitro* are Enhanced by Astroglia
- 3300 Pappone, P.A., and M.D. Cahalan: *Pandinus imperator* Scorpion Venom Blocks Voltage-Gated Potassium Channels in Nerve Fibers
- 3306 Trussell, L.O., and M.B. Jackson: Dependence of an Adenosine-Activated Potassium Current on a GTP-Binding Protein in Mammalian Central Neurons
- 3317 Reh, T.A.: Cell-Specific Regulation of Neuronal Production in the Larval Frog Retina
- 3325 Stewart, G.R., and A.L. Pearlman: Fibronectin-like Immunoreactivity in the Developing Cerebral Cortex

- 3334 Swanson, L.W., D.M. Simmons, P.J. Whiting, and J. Lindstrom: Immunohistochemical Localization of Neuronal Nicotinic Receptors in the Rodent Central Nervous System
- 3343 Gill, R., A.C. Foster, and G.N. Woodruff: Systemic Administration of MK-801 Protects Against Ischemia-Induced Hippocampal Neurodegeneration in the Gerbil
- 3350 Stanfield, B.B., B.R. Nahin, and D.D.M. O'Leary: A Transient Postmamillary Component of the Rat Fornix During Development: Implications for Interspecific Differences in Mature Axonal Projections
- 3362 Jessen, K.R., R. Mirsky, and L. Morgan: Axonal Signals Regulate the Differentiation of Non-Myelin-Forming Schwann Cells: An Immunohistochemical Study of Galactocerebroside in Transected and Regenerating Nerves

Instructions to Authors appear in the January issue only. Copies of the Instructions can be obtained by writing the Society for Neuroscience, 11 Dupont Circle, N.W., Suite 500, Washington, DC 20036.

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 7 (1987) rates for the U.S. are \$150 for individuals and \$350 for institutions. Outside the U.S. add \$60; single copies are \$30. Student subscription rates are available only through the Society for Neuroscience. Institutional (multiple-reader) rates apply to libraries, schools, hospitals, clinics, group practices, and federal, commercial, and private institutions and organizations. 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 inquiries should be directed to the Journals Department, Oxford University Press, 16-00 Pollitt Drive, Fair Lawn, NJ 07410.

Reprints of individual articles are available only from the authors.

Japanese yen price is available from our sole 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 *Current Contents* and *Index Medicus*.

Copyright © 1987 Society for Neuroscience.
All rights reserved.