

The Journal of Neuroscience

The Official Journal of
the Society for Neuroscience

December 1990
Volume 10 Number 12

- 3769 **Feature Article:** Developing Concepts of the Synapses
J.C. Eccles
- 3782 Neurogranin: Immunocytochemical Localization of a Brain-Specific Protein Kinase C Substrate
A. Represa, J.-C. Deloulme, M. Sensenbrenner, Y. Ben-Ari, and J. Baudier
- 3793 Dynorphin A-(1-17) Induces Alterations in Free Fatty Acids, Excitatory Amino Acids, and Motor Function Through an Opiate-Receptor-Mediated Mechanism
R. Bakshi, A.H. Newman, and A.I. Faden
- 3801 Mouse Nerve Growth Factor Prevents Degeneration of Axotomized Basal Forebrain Cholinergic Neurons in the Monkey
V.E. Koliatsos, H.J.W. Nauta, R.E. Clatterbuck, D.M. Holtzman, W.C. Mobley, and D.L. Price
- 3814 Competitive Interactions Between Neurons Making Axosomatic Contacts in the Leech
X. Gu and K. J. Muller
- 3823 Tactile Roughness: Neural Codes That Account for Psychophysical Magnitude Estimates
C.E. Connor, S.S. Hsiao, J.R. Phillips, and K.O. Johnson
- 3837 Oligodendrocytes Arrest Neurite Growth by Contact Inhibition
C. Bandtlow, T. Zachleder, and M.E. Schwab
- 3849 Identification, Secretion, and Neural Expression of APPL, a *Drosophila* Protein Similar to Human Amyloid Protein Precursor
L. Luo, L.E. Martin-Morris, and K. White
- 3862 Immunocytochemical Localization of the Erythroid Glucose Transporter: Abundance in Tissues with Barrier Functions
S.I. Harik, R.N. Kalaria, L. Andersson, P. Lundahl, and G. Perry
- 3873 The Interactions Between Plasma Membrane Depolarization and Glutamate Receptor Activation in the Regulation of Cytoplasmic Free Calcium in Cultured Cerebellar Granule Cells
M.J. Courtney, J.J. Lambert, and D.G. Nicholls
- 3880 The Neural Site of Binocular Rivalry Relative to the Analysis of Motion in the Human Visual System
H. Wiesenfelder and R. Blake
- 3889 Chronic Levodopa Treatment Alters Basal and Dopamine Agonist-Stimulated Cerebral Glucose Utilization
T.M. Engber, Z. Susel, S. Kuo, and T.N. Chase

- 3896 Different Classes of Glutamate Receptors and GABA Mediate Distinct Modulations of a Neuronal Oscillator, the Medullary Pacemaker of a Gymnotiform Electric Fish
M. Kawasaki and W. Heiligenberg
- 3905 Effect of Reinnervation on the Degradation Rate of Junctional Acetylcholine Receptors Synthesized in Denervated Skeletal Muscles
S.-L. Shyng and M.M. Salpeter
- 3916 Colocalization of Neurotensin in Receptors and of the Neurotensin-Degrading Enzyme Endopeptidase 24-16 in Primary Cultures of Neurons
J. Chabry, F. Checler, J.-P. Vincent, and J. Mazella
- 3922 Appetitive Feeding Behavior of *Aplysia*: Behavioral and Neural Analysis of Directed Head Turning
T. Teyke, K.R. Weiss, and I. Kupfermann
- 3935 Pioneer Growth Cone Steering Decisions Mediated by Single Filopodial Contacts *in situ*
T.P. O'Connor, J.S. Duerr, and D. Bentley
- 3947 The Formation of Terminal Fields in the Absence of Competitive Interactions Among Primary Motoneurons in the Zebrafish
D.W.C. Liu and M. Westerfield
- 3960 Kainic Acid on Neostriatal Neurons Intracellularly Recorded *in vitro*: Electrophysiological Evidence for Differential Neuronal Sensitivity
P. Calabresi, M. De Murtas, N.B. Mercuri, and G. Bernardi
- 3970 Dual Effect of Glycine on NMDA-Induced Neurotoxicity in Rat Cortical Cultures
D. McNamara and R. Dingledine
- 3977 Expression of Multiple Neurotransmitter Receptors by Sympathetic Preganglionic Neurons *in vitro*
B. Clendening and R.I. Hume
- 3992 Cell Interactions Regulate Dendritic Morphology and Responses to Neurotransmitters in Embryonic Chick Sympathetic Preganglionic Neurons *in vitro*
B. Clendening and R.I. Hume
- 4006 Patterns of Glutamate Immunoreactivity in the Goldfish Retina
R.E. Marc, W.-L.S. Liu, M. Kalloniatis, S.F. Raiguel, and E. Van Haesendonck
- 4035 Naturally Occurring Fluctuation in Dendritic Spine Density on Adult Hippocampal Pyramidal Neurons
C.S. Woolley, E. Gould, M. Frankfurt, and B.S. McEwen
- 4040 Acknowledgment
- 4043 Author Index
- 4047 Subject Index
- i Volume Contents

Cover picture: A live pioneer neuron growth cone bifurcating at a decision point on the epithelial substrate in a grasshopper embryonic limb (pseudo-color image of fluorescent lipophilic dye labeling of the cell membrane). See O'Connor et al., pp. 3935–3946.