This Week in Science

Frontiers in Neuroscience

Editorial

Letters

News & Comment

Research News

Articles

Frontiers in Neuroscience

Axon Guidance and the Patterning of Neuronal Projections in Vertebrates: J. Dodd and T. M. Jessell

Growth Cone Guidance in Insects: FascinII Is a Member of the Immunoglobulin Superfamily: A. L. Harrelson and C. S. Goodman

Neuronal Cytomechanics: The Actin-Based Motility of Growth Cones: S. J. Smith

Cellular and Molecular Mechanisms of Drug Dependence: G. F. Koob and F. E. Bloom

Long-Term Synaptic Potentiation: T. H. Brown, P. F. Chapman, E. W. Kairiss, C. L. Keenan

The Neural Basis for Learning of Simple Motor Skills: S. G. Lisberger
False color map of intracellular calcium concentration in a guinea pig cerebellar Purkinje cell at the onset of a wave of complex spike activity. A high calcium concentration is observed in the distal dendritic tree. The map was produced from microfluorometric imaging of the fluorescent calcium indicator fura-2. See page 773. [D. W. Tank and J. A. Connor, Molecular Biophysics Research Department, AT&T Bell Laboratories, Murray Hill, NJ 07974; M. Sugimori and R. R. Llinás, Department of Physiology and Biophysics, New York University School of Medicine, New York, NY 10016]

Behavioral Neurophysiology: Insights into Seeing and Grasping: S. P. Wise and R. Desimone

Perspectives on Cognitive Neuroscience: P. S. Churchland and T. J. Sejnowski

Arctic Ocean Ventilation Studied with a Suite of Anthropogenic Halocarbon Tracers: M. Krysell and D. W. R. Wallace

Thermodynamic Efficiency of Brittle Frictional Mountain Building: T. D. Barr and F. A. Dahlem


A Merchansensitive Ion Channel in the Yeast Plasma Membrane: M. C. Gustin, X.-L. Zhou, B. Martinac, C. Kung

Anticodon Switching Changes the Identity of Methionine and Valine Transfer RNAs: L. H. Schuman and H. Pelka


Brain Stem Neurons in Modified Pathways for Motor Learning in the Primate Vestibulo-Ocular Reflex: S. G. Lisberger and T. A. Pavelko

Spatially Resolved Calcium Dynamics of Mammalian Purkinje Cells in Cerebellar Slice: D. W. Tank, M. Sugimori, J. A. Connor, R. R. Llinás

Growth and Transparency in the Lens, an Epithelial Tissue, Stimulated by Pulse of PDGF: B. Brewitt and J. I. Clark

Seventy-Five Years in Ecology, reviewed by, L. B. Slobodka

Racial Hygiene, R. A. Fois

Ubiquitin, H. T. Smith

Books Received

Refrigerated Benchtop Centrifuge

Immunoenzymatic Staining Kits

mRNA Isolation Kit

Mouse Immunoglobulin Identification Kit

Image-Processing Software

Spectrophotometer

Literature