

759 This Week in *Science*

Editorial

761 Ice Minus and Jobs Minus

Letters

763 Human Trials of Malaria Vaccine: R. S. NUSSENZWEIG ■ Impending Energy Crisis?: L. F. IVANHOE; K. P. MAIZE; A. B. LOVINS; W. GRAY; R. L. HIRSCH

News & Comment

766 Private Launch Prospects Improve  
769 World Bank Launches New Environmental Policy  
770 Hungary Seeks Ways to Live Off Its Wits  
771 AIDS Panel Gets Reagan's Approval  
772 Cuts Promised in U.K. Military R&D  
772 Adjusting to an Aging Population  
773 *Briefing*: BioTechnica Clears First EPA Hurdle ■ Alcohol Consumption Down, Research Up ■ Academic R&D Costs Will Double by 1996

Research News

774 Early Signs of School Age IQ  
775 Social Life: A Question of Costs and Benefits: The Multiple Benefits of Babysitting Duties ■ Why Is Ape Tool Use So Confusing? ■ Why Isn't a Leopard More Like a Lion?  
778 Human Trials of New Cancer Therapy Begin  
780 Antiferromagnetism Observed in  $\text{La}_2\text{CuO}_4$

Articles

787 Gene Flow and the Geographic Structure of Natural Populations: M. SLATKIN  
793 Molecular Beam Studies of Elementary Chemical Processes: Y. T. LEE  
799 Neural Cell Adhesion Molecule: Structure, Immunoglobulin-Like Domains, Cell Surface Modulation, and Alternative RNA Splicing: B. A. CUNNINGHAM, J. J. HEMPERLY, B. A. MURRAY, E. A. PREDIGER, R. BRACKENBURY, G. M. EDELMAN

Research Articles

806 Cloning of Large Segments of Exogenous DNA into Yeast by Means of Artificial Chromosome Vectors: D. T. BURKE, G. F. CARLE, M. V. OLSON

Reports

813 A Tunnel in the Large Ribosomal Subunit Revealed by Three-Dimensional Image Reconstruction: A. YONATH, K. R. LEONARD, H. G. WITTMANN  
816 Allelic Exclusion in Transgenic Mice That Express the Membrane Form of Immunoglobulin  $\mu$ : M. C. NUSSENZWEIG, A. C. SHAW, E. SINN, D. B. DANNER, K. L. HOLMES, H. C. MORSE III, P. LEDER

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**COVER** The bat *Pteronotus parnellii* detects, identifies, and catches flying insects by hearing variations in the echoes of the ultrasonic sounds that it emits. Auditory pathways to frontal cortex may play a role in this mammal's ability to use hearing as the chief sensory basis for spatial navigation. See page 824. [The photograph was taken in the laboratory of O. W. Henson, Jr., at the University of North Carolina, Chapel Hill, by Russell Hansen. The moth was tethered to a string for the purpose of the photograph]

- 819 Dual Infection of the Central Nervous System by AIDS Viruses with Distinct Cellular Tropisms: Y. KOYANAGI, S. MILES, R. T. MITSUYASU, J. E. MERRILL, H. V. VINTERS, I. S. Y. CHEN
- 822 Isolation of Extremely Thermophilic Sulfate Reducers: Evidence for a Novel Branch of Archaeobacteria: K. O. STETTER, G. LAUERER, M. THOMM, A. NEUNER
- 824 Auditory Pathways to the Frontal Cortex of the Mustache Bat, *Pteronotus parnellii*: J. B. KOBLER, S. F. ISBEY, J. H. CASSEDAY
- 827 Human T-Lymphotropic Virus Type 4 and the Human Immunodeficiency Virus in West Africa: P. J. KANKI, S. M'BOUP, D. RICARD, F. BARIN, F. DENIS, C. BOYE, L. SANGARE, K. TRAVERS, M. ALBAUM, R. MARLINK, J.-L. ROMET-LEMONNE, M. ESSEX
- 832 Modulation of Memory Processing by Cholecystokinin: Dependence on the Vagus Nerve: J. F. FLOOD, G. E. SMITH, J. E. MORLEY
- 834 Identification of a T3-Associated  $\gamma\delta$  T Cell Receptor on Thy-1<sup>+</sup> Dendritic Epidermal Cell Lines: F. KONING, G. STINGL, W. M. YOKOYAMA, H. YAMADA, W. L. MALOY, E. TSCHACHLER, E. M. SHEVACH, J. E. COLIGAN
- 837 Expression of the art/trs Protein of HIV and Study of Its Role in Viral Envelope Synthesis: D. M. KNIGHT, F. A. FLOMERFELT, J. GHRAYEB
- 840 *Ras* p21 as a Potential Mediator of Insulin Action in *Xenopus* Oocytes: L. J. KORN, C. W. SIEBEL, F. MCCORMICK, R. A. ROTH
- 843 Chemical Identification of a Tumor-Derived Angiogenic Factor: F. C. KULL, JR., D. A. BRENT, I. PARIKH, P. CUATRECASAS
- 845 Efficient Packaging of Readthrough RNA in ALV: Implications for Oncogene Transduction: S. A. HERMAN AND J. M. COFFIN
- 848 Formation of Retinal Ganglion Cell Topography During Prenatal Development: B. LIA, R. W. WILLIAMS, L. M. CHALUPA
- 851 Clonal Restriction Boundaries in *Xenopus* Embryos Shown with Two Intracellular Lineage Tracers: P. SHEARD AND M. JACOBSON

## Book Reviews

- 861 The Communist Party and Soviet Science, reviewed by P. JOSEPHSON ■ The Nature of the Lower Continental Crust, A. W. BALLY ■ The Ecology and Biology of Mammal-like Reptiles, T. S. KEMP ■ Neuromodulation, I. KUPFERMANN ■ Books Received

## Products & Materials

- 865 3-D Graphics Workstation ■ Software for Gel Electrophoresis Analysis ■ On-Line Database Access Software ■ Powerful PCs with 3.5-Inch Disk Drive ■ Graphics Software ■ Chromatography Workstation ■ Microbe-Identification System ■ Literature

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