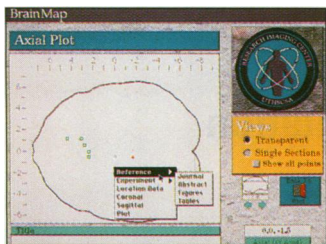


SCIENCE



1872
Neuroscientists find common ground

NEWS & COMMENT

- Databasing the Brain 1872
- Universities Discover That Simplicity Has Its Price 1874
- UC Goes Where Harvard Feared to Tread 1875
- Smoking and Health: Signs of Damage by Radicals 1875
- Spain's Ambitions in Biology Threatened by Funding Freeze 1876

RESEARCH NEWS

- AIDS Vaccines: Is Older Better? Explaining Puzzling Vaccine Results 1880
- Pot, Heroin Unlock New Areas for Neuroscience 1882
- Survival of the Fittest in 1992's Physics and Astronomy Bestiary 1884
- Researchers Swap Material Evidence in Boston 1886

PERSPECTIVES

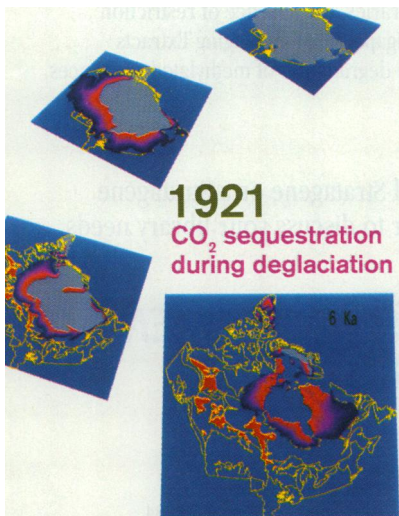
- The Gamma-Ray Cosmos 1894
 E. L. Chupp
- Frosted Flies 1896
 M. Ashburner

ARTICLE

- Biochemistry of Nitric Oxide and Its Redox-Activated Forms 1898
 J. S. Stamler, D. J. Singel, J. Loscalzo

RESEARCH ARTICLES

- Impaired Long-Term Potentiation, Spatial Learning, and Hippocampal Development in *fyn* Mutant Mice 1903
 S. G. N. Grant, T. J. O'Dell, K. A. Karl, P. L. Stein, P. Soriano, E. R. Kandel
- Selection of a Ribozyme That Functions as a Superior Template in a Self-Copying Reaction 1910
 R. Green and J. W. Szostak



DEPARTMENTS	
THIS WEEK IN SCIENCE	1859
EDITORIAL	1861
Molecule of the Year	
MOLECULE OF THE YEAR	1862
NO News Is Good News	
LETTERS	1867
The Taste of Birds: Pitohui!; R. Wrangham; F. H. Pough • Ice Man: Victim of Prehistoric Schnapps?: G. B. McManus; H. Seidler • EMF Research: R. K. Adair; K. Florig • Brain Tumor Treatment: Significant Contributions: R. M. Blaese, K. W. Culver, H. Ishii, E. H. Oldfield, Z. Ram, S. Wallbridge	
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RANDOM SAMPLES	1878
SDI Backs Down Over Reactor Interference • Getting Vaccinated for Breakfast? • Review Demanded on Canadian Blood • Takeout Cold Fusion • Paleontology's 'Jurassic' Windfall, etc.	
INSIDE AAAS	1962
BOOK REVIEWS	1967
<i>Innovation as a Social Process</i> , reviewed by S. Usselman • <i>Cannibalism</i> , D. Mock • <i>Perturbing the Organism</i> , M. Dallman • Vignettes: Remembered Revelries • Books Received	

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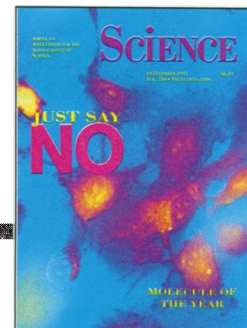
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COVER

Cultured human neurons, one of the targets of the potent signaling molecule nitric oxide (the NO of the cover). The diverse and important roles of NO are just

beginning to be discovered; see the Editorial on page 1861 and the Molecule of the Year story on page 1862. [Photograph: Visuals Unlimited]



REPORTS

Structural and Electronic Properties of La@C₈₂ 1916

K. Laasonen, W. Andreoni, M. Parrinello

Scanning Tunneling Microscopy of Electrodeposited Ceramic Superlattices 1918

J. A. Switzer, R. P. Raffaele, R. J. Phillips, C.-J. Hung, T. D. Golden

Dynamics of Soil Carbon During Deglaciation of the Laurentide Ice Sheet 1921

J. W. Harden, E. T. Sundquist, R. F. Stallard, R. K. Mark

Evidence from the Lamarck Granodiorite for Rapid Late Cretaceous Crust Formation in California 1924

D. S. Coleman, T. P. Frost, A. F. Glazner

Allometric Engineering: A Causal Analysis of Natural Selection on Offspring Size 1927

B. Sinervo, P. Dougherty, R. B. Huey, K. Zamudio

Components of Sterol Biosynthesis Assembled on the Oxygen-Avid Hemoglobin of *Ascaris* 1930

D. R. Sherman, B. Guinn, M. M. Perdok, D. E. Goldberg

Cryobiological Preservation of *Drosophila* Embryos 1932

P. Mazur, K. W. Cole, J. W. Hall, P. D. Schreuders, A. P. Mahowald

Cellular Proteins Bound to Immunodeficiency Viruses: Implications for Pathogenesis and Vaccines 1935

L. O. Arthur, J. W. Bess, Jr., R. C. Sowder II, R. E. Benveniste, D. L. Mann, J.-C. Chermann, L. E. Henderson

Protective Effects of a Live Attenuated SIV Vaccine with a Deletion in the *nef* Gene 1938

M. D. Daniel, F. Kirchhoff, S. C. Czajak, P. K. Sehgal, R. C. Desrosiers

Targeted Degradation of c-Fos, But Not v-Fos, by a Phosphorylation-Dependent Signal on c-Jun 1941

A. G. Papavassiliou, M. Treier, C. Chavrier, D. Bohmann

Retinoids Selective for Retinoid X Receptor Response Pathways 1944

J. M. Lehmann, L. Jong, A. Fanjul, J. F. Cameron, X. P. Lu, P. Haefner, M. I. Dawson, M. Pfahl

Isolation and Structure of a Brain Constituent That Binds to the Cannabinoid Receptor 1946

W. A. Devane, L. Hanuš, A. Breuer, R. G. Pertwee, L. A. Stevenson, G. Griffin, D. Gibson, A. Mandelbaum, A. Etinger, R. Mechoulam

Direct Visualization of the Dendritic and Receptive Fields of Directionally Selective Retinal Ganglion Cells 1949

G. Yang and R. H. Masland

Cloning of a Delta Opioid Receptor by Functional Expression 1952

C. J. Evans, D. E. Keith, Jr., H. Morrison, K. Magendzo, R. H. Edwards

Prevention of Programmed Cell Death in *Caenorhabditis elegans* by Human *bcl-2* 1955

D. L. Vaux, I. L. Weissman, S. K. Kim

Neutrophil Recruitment by Tumor Necrosis Factor from Mast Cells in Immune Complex Peritonitis 1957

Y. Zhang, B. F. Ramos, B. A. Jakschik



1955
Foiling the hangman's noose ... in worms

Indicates accompanying feature

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Science

258 (5090)

Science **258** (5090), 1859-1971.

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