POLICY FORUM

Uncertainty, Resource Exploitation, and Conservation: Lessons from History
D. Ludwig, R. Hilborn, C. Walters

NEWS & COMMENT

Computing's Controversial Patron
American Family Tree Gets New Root
Researchers Win Decision on Knockout Mouse Pricing
A New Model for Gene Patents?

NSF Wins, NIH Loses in Clinton's 1994 Budget
The Greening of the National Labs

RESEARCH NEWS

Huntington's Gene Finally Found
Gene Discovery Points to Better HD Test

Toxicologists—and Snow—Descend on New Orleans

DEPARTMENTS

THIS WEEK IN SCIENCE

EDITORIAL

Improvements in Health Care

LETTERS

EMF and Cancer: ORAU Panel on Health Effects of Low-Frequency Electric and Magnetic Fields; A. Ahlbom and M. Feychting • Drug Abuse Research: R. A. Millstein

SCIENTESCOPE

Random Samples

Feds 'Abdicate' Fight Over Toxic Compounds • How to Catch a (Gravity) Wave • Crafoord Prize Goes to Two Geneticists • Leaving the Scene After Victory • NAS Director to Move to Carnegie, etc.

BOOK REVIEWS

Infrared Astronomy with ISO, reviewed by C. A. Reichman • Dynamics of the Standard Model, P. S. Drell • William Diller Matthew, Paleontologist, L. F. Laporte • Books Received

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A high-fidelity ocean model

PERSPECTIVES

DNA Repair and Transcription: The Helicase Connection
S. Buratowski

Superstructures and Superconductivity
Z. Fisk and G. Aeppli

ARTICLES

Light Emission from Silicon
S. S. Iyer and Y.-H. Xie

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A trial run for technology policy

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Superconducting vortex

Ocean-in-a-Machine Starts Looking Like the Real Thing
The Parallel Route to an Ocean Model

Pinning Down a Missing Link in Massive Stars

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Neural network model of the primate motor cortex, with cells coding different directions of movement (purple balls with directional blue cones). Interactions between cells vary, ranging from strong excitatory (red, similar directions) to strong inhibitory (green, opposite directions), depending on the similarity of the preferred directions in a cell pair. See page 47. [Computer graphics, Masato Taira and Apostolos Georgopoulos. Production: Eugene Eubank, Medical Media Service, Minneapolis Veterans Affairs Medical Center]

Cognitive Neurophysiology of the Motor Cortex
A. P. Georgopoulos, M. Taira, A. Lukashin

RESEARCH ARTICLES

Molecular Mechanism of Transcription- Repair Coupling
C. P. Selby and A. Sancar

DNA Repair Helicase: A Component of
BTF2 (TFIIH) Basic Transcription Factor

REPORTS

Diamonds in Dense Molecular Clouds:
A Challenge to the Standard Interstellar Medium Paradigm

Strong, Pure, and Uniform Carbon Fibers
Obtained Directly from the Vapor Phase
F. T. Wallenberger and P. C. Nordine

A Photoinduced Persistent Structural Transformation of the Special Pair of a Bacterial Reaction Center
N. R. S. Reddy, S. V. Kolaczkowski, G. J. Small

Evidence for Photochemical Formation of
H₂O₂ and Oxidation of SO₂ in Authentic Fog Water
Y. Zuo and J. Hoigné

Aqueous-Phase Photochemical Formation of Peroxides in Authentic Cloud and Fog Waters
B. C. Faust, C. Anastasio, J. M. Allen, T. Arakaki

Genetic Conversion of a Fungal Plant Pathogen to a Nonpathogenic, Endophytic Mutualist
S. Freeman and R. J. Rodriguez

Skn-1a and Skn-1l: Two Functionally Distinct Oct-2-Related Factors Expressed in Epidermis
B. Andersen, M. D. Schonemann, S. E. Flynn, R. V. Pease II, H. Singh, M. G. Rosenfeld

Rhythmic Exocytosis Stimulated by GnRH-Induced Calcium Oscillations in Rat Gonadotropes
A. Tse, F. W. Tse, W. Almers, B. Hille

Altered Growth of Human Colon Cancer Cell Lines Disrupted at Activated Ki-ras
S. Shirasawa, M. Furuse, N. Yokoyama, T. Sasaki

Phosphatidylinositol 3-Kinase Encoded by Yeast VPS34 Gene Essential for Protein Sorting
P. V. Schu, K. Takegawa, M. J. Fry, J. H. Stack, M. D. Waterfield, S. D. Emr

Natural Selection and the Origin of jingwei, a Chimeric Processed Functional Gene in Drosophila
M. Long and C. H. Langley

Modulation of Neuronal Migration by NMDA Receptors
H. Komuro and P. Rakic

HLA-A11 Epitope Loss Isolates of Epstein-Barr Virus from a Highly A1* Population

Extracellular Access to the Na,K Pump:
Pathway Similar to Ion Channel
D. C. Gadsby, R. F. Rakowski, P. De Weer

Developmental Regulation of Neural Response to FGF-1 and FGF-2 by Heparan Sulfate Proteoglycan
V. Nurcombe, M. D. Ford, J. A. Wildschut, P. F. Bartlett

Indicates accompanying feature

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Editor's Summary

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