NEWS & COMMENT

Strong Medicine for NIH

DOE Ponders Yet More Uses for SSC

Occupational Health: Toxic Tiff Spreads Beyond France

House Trims NSF Funding Plan

Electronic Networks: Cyberspace Offers Chance to Do 'Virtually' Real Science

RESEARCH NEWS

Zebrafish Hit the Big Time

Dying Stars Give Galactic Theory New Life

Red Galaxies Hint at an Old Universe

Keeping Tabs on Cometary Breakups


Post-Polio Syndrome: Remembrance of Viruses Past

PERSPECTIVES

Distant Effects of Volcanism—How Big and How Often?

T. Simkin

Folding Pattern Diversity of Integral Membrane Proteins

S. W. Cowan and J. P. Rosenbusch

ARTICLES

Terawatt to Petawatt Subpicosecond Lasers

M. D. Perry and G. Mourou

Sex Determination and Dosage

Compensation: Lessons from Flies and Worms

S. M. Parkhurst and P. M. Meneely

RESEARCH ARTICLE

Drosophila TAF150: Similarity to Yeast Gene TSM-1 and Specific Binding to Core Promoter DNA

C. P. Verrijzer, K. Yokomori, J.-L. Chen, R. Tjian

REPORTS

Observation of Quantum-Size Effects at Room Temperature on Metal Surfaces With STM

P. Avouris and L.-W. Lyo

Diacytlenic Lipid Tubules: Experimental Evidence for a Chiral Molecular Architecture


DEPARTMENTS

THIS WEEK IN SCIENCE

EDITORIAL

Research in the Service of Jobs and Health

LETTERS

Milk Safety: A. L. Rubin; M. Goodman

NAGPRA 125th: J. W. Bradley; J. Bryant

Indirect Pesticide Costs: D. Pimentel

SCIENCESCOPE

RANDOM SAMPLES

PRODUCTS & MATERIALS

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Keith Yamamoto
From Antarctica and black holes to yeast genetics and zippers, a broad array of subjects are represented by the books covered in this special issue of Science. And in the opening group of essay reviews, some current and sometimes unsettling trends in thinking about science and its place in the world at large are examined. A full listing of the books reviewed appears on page 981. [Cover design: C. Faber Smith. Letters A, C, E, G, and U from Mercury Archives/The Image Bank]

Record of Volcanism Since 7000 B.C. 948
from the GISP2 Greenland Ice Core and Implications for the Volcano-Climate System
G. A. Zielinski, P. A. Mayewski, L. D. Meeker, S. Whitlow, M. S. Twickler, M. Morrison, D. A. Meese, A. J. Gow, R. B. Alley

Seven Million Years of Glaciation in Greenland
H. C. Larsen, A. D. Saunders, P. D. Clift, J. Beget, W. Wei, S. Spezzaferri, ODP Leg 152 Scientific Party

Isotopic Evidence for Neogene Hominid Paleoenvironments in the Kenya Rift Valley
J. D. Kingston, B. D. Marino, A. Hill

Role of Bone Marrow-Derived Cells in Presenting MHC Class I-Limited Tumor Antigens
A. Y. C. Huang, P. Columb, M. Ahmdadze, E. Jaffee, D. Pardoll, L. Levitsky

Cloning of a T Cell Growth Factor That Interacts with the β Chain of the Interleukin-2 Receptor

Cloning of a Grb2 Isoform with Apoptotic Properties
I. Fath, F. Schweighoffer, I. Rey, M.-C. Mlton, J. Boitiaux, M. Ducheine, B. Tocqué

Activity-Dependent Changes in the Intrinsic Properties of Cultured Neurons
G. Turrigiano, L. F. Abbott, E. Marder

Aberrant Neurites and Synaptic Vesicle Protein Deficiency in Synapsin II-Depleted Neurons
A. Ferreira, K. S. Kosik, P. Greengard, H.-Q. Han

SPECIAL BOOK SECTION

Grand Narratives Scrutinized, by J. W. Slade; other reviews by S. Fuller, R. W. Nichols, B. M. Berger
An Actor in Recent History, by C. S. Gruber; other reviews by P. Ceruzzi, L. Zenderland
The Industrialization of Chemistry, by J. W. Sieros; other reviews by K. Alder, C. R. Koppes
The Chemical Past, by M. J. Nye; other review by G. T. Gillies
Adventures in Space-Time, by J. Silk; other review by G. T. Gillies
Southernmost Fauna, by D. Policansky; other reviews by J. A. Lillegren, J. Seidensticker
Saccharomyces and Company, by J. Rine; other reviews by D. M. Hillis, E. Cox
Visual Functions, by P. Lennie, other review by J. F. Kilhstrom
Growing Up in Context, by K. W. Jones; other reviews by E. Dwyer, N. Rogers
The Generation of Culture, by J. R. Bowen; other review by A. Michalowski
Arctic Gold, by E. S. Hall; other reviews by G. E. Fogg, P. D. Welch
Books Reviewed in Science
21 May 1993 Through 6 May 1994

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Terawatt reflections