NEWS
The Hand on Your Purse Strings
“If we get into a fight, I'm not a pacifist.”
192
Livermore Lab Chief Nuckolls Resigns
195
Under Pressure
Report: All’s Fair in NSF Major Awards
196
Nicotine Research: Key Study
196
Unveiled—11 Years Late
SIDS Paper Triggers a Murder Charge
197
Livermore Physicists Ask for the Sun
198
Deep-Trench Research Waits on Balky
199
Japanese Submersible
In Pittsburgh, Physicists Get Down
to the Nitty-Gritty
200
Ecologists Dare to Ask: How Much Does
Diversity Matter?
202
Trail of Toxins Leads Through Conference
Rooms in Dallas
204

SPECIAL NEWS REPORT
Leroy Hood: Thinking Big in Seattle
206
UW Team Reaches Out to Grade- and
High-School Students

POLICY FORUM
Science in the National Interest
221
B. A. Mikulski

PERSPECTIVES
Self-Organization in Living Cells
223
B. Hess and A. Mikhailov

The Evolution of Genetic Intelligence
224
D. S. Thaler

ARTICLE
Modulated Magnetic Phases in Rare Earth
226
Metallic Systems
T. Chattopadhyay

RESEARCH ARTICLE
Neural Mechanisms for Forming a
Perceptual Decision
231
C. D. Saltz and W. T. Newcomb

Board of Reviewing Editors
John Abelson
Frederick W. Alt
Don L. Anderson
Michael Ashburner
Stephen J. Benkovic
David E. Bloom
Floyd E. Bloom
Peret Borel
Michael S. Brown
Henry R. Bourne
James J. Burh
Kathryn Calame
C. Thomas Caskey
Dennis W. Choi
John M. Coffin
Paul J. Greiner
Robert Desimone
Nicole Le Douarin
Bruce F. Eadridge
Paul T. Englund
Richard G. Fairbanks
Douglas T. Fearon
Harry A. Fozard
Klaus Friedrich
Theodore H. Geisler
Margaret J. Geller
John C. Gerhart
Roger M. Glass
Stephen P. Gold
Peter N. Goodfellow
Corey S. Goodman
Stephen J. Gould
Ira Herskowitz
Eric F. Johnson
Stephen M. Kosinski
Michael LaBarbera
Charles S. Levinson
Alexander Levitzki
Harvey F. Lodish
Richard Losick
Diane Mathis
Anthony R. Means
Shigetada Nakahori
Roger A. Nicoll
William H. Orme-Johnson
John III
Stuart L. Pimm
Yesihaayas Pocker
Dennis A. Powers
Ralph S. Quatrano
V. Ramanathan
Douglas C. Rees
T. M. Rice
Erik Ruoslahti
David C. Ruble
Gottfried Schatz
Jost Schell
Ronald H. Schwartz
Terence J. Seyedi
Ellen Solomon
Thomas A. Stielitz
Michael P. Styerer
Richard F. Thompson
Robert T. N. Tsien
Emil R. Umane
Gerard J. Vermeij
Bert Vogelstein
Harold Weintraub
Zena Werb
George M. Whitesides
Owen N. Witte
William A. Wulf
Keith Yamamoto
Scanning electron micrograph of stomatal rows from a modern limber pine needle (image width ~ 1 mm). The density of stomata (pores that permit a plant to exchange gases with the atmosphere) of needles from fossil pack rat middens decreased 17% during the last deglaciation, concomitant with a 30% increase in atmospheric CO₂. See page 239. [Micrograph: Peter K. Van de Water, Department of Geosciences, and David Bentley, Division of Biotechnology, Arizona Technology Laboratory, University of Arizona, Tucson]

REPORTS

Stellar Luminosity Variations and Global Warming
P. Foukal

Trends in Stomatal Density and 13C/12C Ratios of Pinus flexilis Needles During Last Glacial-Interglacial Cycle
P. K. Van de Water, S. W. Leavitt, J. L. Betancourt

Quantifying Global Warming from the Retreat of Glaciers
J. Oerlemans

Morphological Bifurcations Involving Reaction-Diffusion Processes During Microtubule Formation
J. Tabony

Molecular Nanotube Aggregates of β- and γ-Cyclodextrins Linked by Diphenylhexatrienes
G. Li and L. B. McGown

Binding and Suppression of the Myc Transcriptional Activation Domain by p107
W. Gu, K. Bhatia, I. T. Magrath, C. V. Dang, R. Dalla-Favera

Related Target Enhancers for Dorsal and NF-κB Signaling Pathways
S. Gonzalez-Crespo and M. Levine

Recombination in Adaptive Mutation
R. S. Harris, S. Longerich, S. M. Rosenberg

Isolation of S. cerevisiae snRNPs:
Comparison of U1 and U4/U6.U5 to Their Human Counterparts
P. Fabrizio, S. Esser, B. Kasrner, R. Lührmann

Mutational Isolation of a Sieve for Editing in a Transfer RNA Synthetase
E. Schmidt and P. Schimmel

Stimulation of Human γδ T Cells by Nonpeptidic Mycobacterial Ligands
P. Constant, F. Davodeau, M.-A. Peyrat, Y. Poquet, G. Puzo, M. Bonneville, J.-J. Fournié

Telomere-Led Premiotic Chromosome Movement in Fission Yeast
Y. Chikashige, D.-Q. Ding, H. Funabiki, T. Haraguchi, S. Mashiko, M. Yanagida, Y. Hiraoka

Requirement for the Yeast Gene LON in Intramitochondrial Proteolysis and Maintenance of Respiration
C. K. Suzuki, K. Suda, N. Wang, G. Schatz

Soluble β-Amyloid Induction of Alzheimer’s Phenotype for Human Fibroblast K+ Channels
R. Etcheberryaray, E. Ito, C. S. Kim, D. L. Alkon

TECHNICAL COMMENTS

High-Pressure Melting of (Mg,Fe)SiO3-Perovskite
D. L. Heinz, E. Knittle, J. S. Sweeney, Q. Williams, R. Jeanloz, R. Boehler and A. Zerr

Statistical Analyses of Soil Quality
D. A. Wardle; J. P. Reganold

238
Inconstant sun

270
Telomeres (green) cluster near spindel pole body (red) in yeast karyogamy

SCIENCE • VOL. 264 • 8 APRIL 1994

AAAS Board of Directors

Elise E. Clark
Rising President, Chairman
Francisco J. Ayala
President
Rita R. Colwell
President-elect
William A. Lester Jr.
Simone A. Levin
Anna G. Roosevelt

Indicates accompanying feature

SCIENCE (ISSN 0036-8075) is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Second-class postage (publication No. 484400) paid at Washington, DC, and additional mailing offices. Copyright © 1994 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (51 issues): $92 ($50 allocated to subscription). Domestic institutional subscription (51 issues): $215. Foreign postage extra: Mexico, Caribbean (surface mail) $50; other countries (air-assist delivery) $95. First class, airmail, student and emeritus rates on request. Canadian rates with GST available upon request, GST #125488122. Change of address: allow 6 weeks, giving old and new addresses and 11-digit account number. Postmaster: Send change of address to Science, P.O. Box 2000, Marion, OH 43305-2003. Single copy sales: $6.00 per issue prepaid includes surface postage, Guide to Biotechnology Products and Instruments, $20. Bulk rates on request. Authorization to photocopy material for internal or personal use, provided full credit is given to SCIENCE and the copy is not resold, is granted by the AAAS to libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of $1 per copy plus $0.10 per page is paid directly to CCC, 27 Congress Street, Salem, MA 01970. The identification code for Science is 0036-8075/94 $1 + .10. Science is indexed in the Reader’s Guide to Periodical Literature and in several specialized indexes.