1282
Science in the new South Africa

1312
Tracking an intermediate

NEWS
Bellcore Looks for a Connection 1268
Emphasis Turns From Mapping to Large-Scale Sequencing 1270
Senate Restores NIH Funding Cut 1271
Republicans Take Ax to NOAA Research 1272
Venter Wins Sequencing Race—Twice 1273
Scientists Named in PCR Suit 1273
At the Heart of Earthquakes, Seismologists Look for Pulse 1274
DNA Repair Defect Tied to Mutated TGF-β Receptor Gene 1276
Grown-Up Physicists Play Serious Games in the Sandbox 1277
Siberia: Surprising Home for Early Modern Humans 1279

SPECIAL NEWS REPORT
Elite Science in a Poor Country 1282
South African Research Comes In From the Cold 1283

DEPARTMENTS
THIS WEEK IN SCIENCE 1257
EDITORIAL 1259
LETTERS 1261


Accelerator Center: National Symbol or White Elephant? 1284
Marine Scientists Take the Lead From Those in Need 1286
Universities Struggle With the Legacy of Apartheid 1287

PERSPECTIVE

ARTICLE
Mineral Resources, Environmental Issues, and Land Use 1305
C. A. Hodges

RESEARCH ARTICLE

SCIENCESCOPE
D. H. Green

BOOK REVIEWS
More Inclusive Archeology, reviewed by B. J. Little • Vignettes: Other Books of Interest • Books Received: Publishers' Addresses 1380

PRODUCTS & MATERIALS 1385

Board of Reviewing Editors

Frederick W. Alt
Don L. Anderson
Michael Ashburner
Stephen J. Benkovic
David E. Bloom
Piet Borst
Henry R. Bourne
Michael S. Brown
James J. Bull
Kathryn Calame
C. Thomas Caskey
Dennis W. Choi
John M. Coffin
F. Fleming Crim
Paul J. Crutzen
James E. Dahlberg
Robert Deamone
Bruce F. Edidjge
Paul T. Englund
Richard G. Farbanks
Douglas T. Fearon
Harry A. Fozzard
Klaus Friedrich
Theodore H. Geballe
Roger I. M. Glass
Stephen P. Guff
Peter M. Goodfellow
Corey S. Goodman
Ira Herskowitz
Eric F. Johnson
Stephen M. Kosslyn
Michael LeBarbera
Nicole LeDoulcier
Charles S. Levinson III
Alexander Levizki
Harvey F. Lodish
Richard Losick
Reinhard Lührmann
Diane Mathis
Anthony R. Means
Shigetada Nakashima
Roger A. Nicoll
Stuart L. Rimn
Yeshayau Pocker
Dennis A. Powers
Ralph S. Quarrano
V. Ramanathan
Douglas C. Rees
T. M. Ria
David C. Rubie
Erki Rusuolahi
Gottfried Schatz
Josef Schell
Ronald H. Schwartz
Terrence J. Seeverski
Eleni Solomon
Thomas A. Steitz
Michael P. Styrer
Robert T. N. Tian
Emri R. Unanue
Gesar J. Vermej
Bert Vogelstein
Arthur Weiss
Zena Werb
George M. Whitesides
Gwen N. White
William A. Wulf
Surface displacement associated with the 17 May 1993 Eureka Valley, California, earthquake obtained by interferometric processing of radar images acquired by the European Remote Sensing Satellite (ERS-1). Each color cycle represents 28 millimeters of ground displacement parallel to the satellite line of sight. Concentric rings depict subsidence of the hanging wall in response to the slip on the fault at depth. Width of the image is ~40 kilometers. See page 1333. [Image: Courtesy of Jet Propulsion Laboratory]

**REPORTS**

**Anharmonic Wave Functions of Proteins: Quantum Self-Consistent Field Calculations of BPTI**
A. Roitberg, R. B. Gerber, R. Elber, M. A. Ratner

**Pressure-Tuned Fermi Resonance in Ice VII**
K. Aoki, H. Yamawaki, M. Sakashita

**Mesostructure Design with Gemini Surfactants: Supercage Formation in a Three-Dimensional Hexagonal Array**
Q. Huo, R. Leon, P. M. Petroff, G. D. Stucky

**Solar-Like M-Class X-ray Flares on Proxima Centauri Observed by the ASCA Satellite**
B. Haisch, A. Antunes, J. H. M. M. Schmitt

**Beryllium-10 Dating of the Duration and Retreat of the Last Finedale Glacial Sequence**
J. C. Gosse, J. Klein, E. B. Evenson, B. Lawn, R. Middleton

**Surface Displacement of the 17 May 1993 Eureka Valley, California, Earthquake Observed by SAR Interferometry**
G. Peltzer and F. Rosen

**Inactivation of the Type II TGF-β Receptor in Colon Cancer Cells with Microsatellite Instability**

**Head Segmentation in Early Cambrian Fuxianhia: Implications for Arthropod Evolution**

**Fibroblasts as Efficient Antigen-Presenting Cells in Lymphoid Organs**

**Mutations in Fas Associated with Human Lymphoproliferative Syndrome and Autoimmunity**

**Cardiac Function in Mice Overexpressing the ß-Adrenergic Receptor Kinase or a ßARK Inhibitor**
W. J. Koch, H. A. Rockman, P. Samama, R. Hamilton, R. A. Bond, C. A. Milano, R. J. Lefkowitz

**Sensorimotor Encoding by Synchronous Neural Ensemble Activity at Multiple Levels of the Somatosensory System**
M. A. L. Nicolelis, L. A. Baccala, R. C. S. Lin, J. K. Chapin

**Stable Transfection of Malaria Parasite Blood Stages**
M. R. van Dijk, A. P. Waters, C. J. Janse

**Role of the Protein Chaperone YDJ1 in Establishing Hsp90-Mediated Signal Transduction Pathways**
Y. Kimura, I. Yahara, S. Lindquist

**TECHNICAL COMMENTS**

**Introns and the Origin of Protein-Coding Genes**

**Glacial retreat**

AAAS Board of Directors

Francisco J. Ayala, Retiring President, Chairman
Rita R. Colwell, President
Jane Lubchenco, President-elect
William A. Lester Jr., Simon A. Levin, Michael J. Novacek


SCIENCE (ISSN 0036-8075) is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1200 New York Ave., N.W., Washington, D.C. 20005; Second-class postage (publication No. 484460) paid at Washington, D.C. and additional mailing offices. Copyright © 1995 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): $97.50 (allocated to subscription); Domestic institutional subscription (51 issues): $228. Foreign postal service extra: Mexico, Caribbean (surface mail) $53; other countries (air assisted delivery) $93. First class, airmail, student and emeritus rates on request. Canadian rates with GST available upon request, GST #1254 88132. Printed in the U.S.A.

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 2003, Marion, OH 43305-0203. Single copy sales: $7.00 per issue prepaid includes surface postage; bulk rates on request. Authorization to photocopy material for internal or personal use, or the internal or personal use of specific clients, is granted by 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 0036-8075/83 $1 + .10. Science is indexed in the Reader’s Guide to Periodical Literature and in several specialized indexes.