NEWS & COMMENT

Mammography Trial Comes Under Fire 1128
New Clue Found to Oncogene's Role in Breast Cancer

CDC Closes the Case of the Florida Dentist 1130

Wellcome Trust: Britain's Big Biomedical Spender 1132

Is the United States Losing Its Lead? 1133

State Officials Slow Research on the Effects of the Spill 1134

Researchers Fret Over Neglect of 600 Million Patients 1135

RESEARCH NEWS

Global Change

Greenhouse Science Survives Skeptics 1138

• Does Global Change Threaten the World Food Supply? • Chemical Prospecting: Hope for Vanishing Ecosystems? • Japan Bids for Global Leadership in Clean Industry • There's a New Offering on Campus: Global Change 101

PERSPECTIVES

Stalking the Elusive Atmospheric 1154
Hydroxyl Radical W. H. Brune

The Continuing Case of the Florida Dentist 1155
T. F. Smith and M. S. Waterman

ARTICLES

The Oxidizing Capacity of the Earth's Atmosphere: Probable Past and Future Changes A. M. Thompson


DEPARTMENTS

THIS WEEK IN SCIENCE 1107
EDITORIAL 1109
Failure at the Earth Summit: F. S. Rowland

LETTERS

Psychological Matters: L. P. Lipsitt • Education Resources: E. Pastor • Tuberculosis Rebounding: P. J. Brennan • Provocative Crystallography: N. D. Mermin • Neem Seed Oil Toxic to Crustaceans: J. S. Weis

ASSOCIATION AFFAIRS 1119
The Advancement of Science: L. M. Lederman

BOOK REVIEWS 1223

PRODUCTS & MATERIALS 1228

AAAS Board of Directors

Leon M. Lederman
Retiring President, Chairman
F. Sherwood Rowland
President
Eliseo E. Clark
President-elect
Mary Ellen Avery
Francisco J. Ayala
Robert A. Frosch

Florence P. Haseltine
Alan Scherliech
Jeanne M. Shreeve
Chang-Lin Tien
Warren M. Washington

William T. Golden
Treasurer
Richard S. Nicholson
Executive Officer

John Abelsohn
Frederick W. Alt
Don L. Anderson
Stephen J. Benkovic
David E. Bloom
Floyd E. Bloom
Henry R. Bourne
James J. Bull
Kathryn Calame
C. Thomas Caskey
Dennis W. Cho

John M. Coffin
Bruce F. Eldridge
Paul T. Englund
Richard G. Fairbanks
Douglas T. Fearon
Harry A. Fozard
Victor R. Fuchs
Theodore H. Geiselle
Margaret J. Geller
John C. Gerhart
Roger I. M. Glass

Stephen P. Goff
Corey S. Goodman
Stephen J. Gould
Ira Herskowitz
Eric F. Johnson
Stephen M. Kosslyn
Michael LaBarbera
Charles S. Levinson
Harvey F. Lodish
Richard Losick
Anthony R. Means

Mortimer Mishkin
Roger A. Nicoll
William H. Orme-Johnson III
Stuart L. Penn
Yoshihisa Tucker
Denis A. Powers
Rolph S. Quatrano
V. Ramanathan
Erik Russel
Ronald H. Schwartz
Terrence J. Sejnowski

Thomas A. Steitz
Richard F. Thompson
Robert T. N. Tjian
Emil R. Unanue
Geert J. Vermeulen
Bert Vogelstein
Harold Weintraub
Zena Werb
George M. Whitesides
Owen N. Witte
Keith Yamamoto

Board of Reviewing Editors

Downloaded from http://science.sciencemag.org/ on July 4, 2021
Nearly identical high-resolution images of a segment of BlueScript II plasmid DNA scanned in the atomic force microscope. By imaging plasmid DNA on mica in n-propanol, reproducible structure along the DNA strand can be revealed; this segment was scanned continuously for 15 minutes without moving or being damaged. Such imaging holds promise for the investigation of protein–nucleic acid interactions and chromosome mapping. See page 1180. [Computer art by Scott Hansma]

RESEARCH ARTICLE

Designed Enediyines: A New Class of DNA-Cleaving Molecules with Potent and Selective Anticancer Activity

REPORTS

Crossover Reactions Between Synthetic Replicators Yield Active and Inactive Recombinants
Q. Feng, T. K. Park, J. Rebek, Jr.

Reproducible Imaging and Dissection of Plasmid DNA Under Liquid with the Atomic Force Microscope

The Schumann Resonance: A Global Tropical Thermometer
E. R. Williams

An Intercomparison of Tropospheric OH Measurements at Fritz Peak Observatory, Colorado
G. H. Mount and F. L. Eisele

Synthesis and Electronic Transport of Single Crystal K$_2$Co

Scandium Clusters in Fullerene Cages
C. S. Yannoni, M. Hoinkis, M. S. de Vries, D. S. Bethune, J. R. Salem, M. S. Crowder, R. D. Johnson

Identification of the Ah Receptor Nuclear Translocator Protein (Arnt) as a Component of the DNA Binding Form of the Ah Receptor
H. Reyes, S. Reisz-Porszasz, O. Hankinson

Tyrosine Phosphorylation of the vav
X. R. Bustelo and M. Barbacid

Proto-Oncogene Product in Activated B Cells
Calmodulin Trapping by Calcium-
Calmodulin–Dependent Protein Kinase
T. Meyer, P. I. Hanson, L. Stryer, H. Schulman

A Mutant of TTX-Resistant Cardiac Sodium Channels with TTX-Sensitive Properties

Identification of Heregulin, a Specific Activator of p185

Less Mortality but More Relapses in Experimental Allergic Encephalomyelitis in CD8$^{-/-}$ Mice

Role of CD8$^{+}$ T Cells in Murine Experimental Allergic Encephalomyelitis
H. Jiang, S.-J. Zhang, B. Perris

G Protein Activation of a Hormone-
Stimulated Phosphatase in Human Tumor Cells
M. G. Pan, T. Florio, P. J. S. Stork

Heteromeric NMDA Receptors: Molecular and Functional Distinction of Subtypes
H. Monyer, R. Sprengel, R. Schopfer, A. Herb, M. Higuchi, H. Lomeli, N. Burnashev, B. Sakmann, P. H. Seeburg

1154, 1157, 1187

Atmospheric oxidants

Indicates accompanying feature

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, N.W., Washington, DC 20005. Second-class postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 1992 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): $87 (847 allocated to subscription), Domestic institutional subscription (51 issues): $195; 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 #1254 88122. 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 2033, Marion, OH 43305-2033. 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 under circumstances not falling within the fair use provisions of the Copyright Act 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. 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.

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objectives are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, to advance education in science, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.