NEWS & COMMENT

The Genome Project: Life After Watson 956
A Standing Ovation From the Troops
Britain Plans Large-Scale Sequencing Center

Peer Review Catches Congressional Flak 959
Did OSI Rewrite History?

What Should It Take to Join Science's Most Exclusive Club?
New Academy Members 961

RESEARCH NEWS

Looking Glass Chemistry 964
Government Smiles on One-Handed Drugs

HIV Comes in Five Family Groups 966
Giving Personal Magnetism a Whole New Meaning

Hot Rumors, Blue Light, and Modern Art
Shake Up Frisco

'Transparent' Proofs Help Solve Opague Problems
Sightseeing at a Black Hole Gets Easier 971

PERSPECTIVES

Giant Magnetoresistance in Magnetic Layered and Granular Materials
P. M. Levy

Dendritic Spines: Convergence of Theory and Experiment
C. Koch, A. Zador, T. H. Brown

ARTICLES

Vibrational Modes and the Dynamic Solvent 975
Effect in Electron and Proton Transfer
P. F. Barbara, G. C. Walker, T. P. Smith

Energy Sources: A Realistic Outlook 981
C. Starr, M. F. Searl, S. Alpert

Airborne Studies of the Smoke from the Kuwait Oil Fires
P. V. Hobbs and L. F. Radke

RESEARCH ARTICLE

Site-Specific Modification of Pre-mRNA: The 2'-Hydroxyl Groups at the Splice Sites
M. J. Moore and P. A. Sharp

DEPARTMENTS

THIS WEEK IN SCIENCE 943
EDITORIAL 945
A Major Generation Gap

LETTERS 949
antarctic environmental concerns: w. e. massey, a. c. fraser-smith, r. a. helliwell, l. j. lanzerotti, t. j. rosenberg • superconducting transition temperature of doped C60: reaction: Z Isqbal

PRODUCTS & MATERIALS 1074

AAAS Board of Directors
Leon M. Lederman
President
Richard A. Smalley
President-elect
Mary Ellen Avery
F. Sherwood Rowland

John Abelson
Executive Officer
Florence P. Haseltine
Jeanne M. Sheehan
Chang-Lin Tien
Warren M. Washington
William T. Golden
Richard S. Nicholson

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

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

Stephen P. Gold
Corey S. Goodman
Stephen J. Gould
Ira Herskowitz
Eric F. Johnson
Stephen M. Koseiy
Konrad B. Krauskopf
Michael LaBarbera
Charles B. Levinson III
Harvey F. Lodish
Richard Losick

R. H. Baughman, S. Khare, N. S. Murthy,
B. L. Ramakrishna, H. J. Bornemann, D. E. Morris

RESEARCH ARTICLE

Site-Specific Modification of Pre-mRNA:
The 2'-Hydroxyl Groups at the Splice Sites
M. J. Moore and P. A. Sharp
Ceramic effigy from outside the Maya tomb of the Royal Scribe at Copán, Honduras, one of the artifacts depicted in Scribes, Warriors and Kings, reviewed on page 1062. In addition to views of what years of archeological inquiry tell us about the Maya, a two-century conspectus on developmental biology and critiques of the role of scientists in public affairs are among the features of this Book Issue. For a list of books reviewed in this issue, see page 1035. [Photograph: Kenneth Garrett]

REPORTS

Depolarization of Alfalfa Root Hair 998
Membrane Potential by Rhizobium meliloti Nod Factors
D. W. Ehrhardt, E. M. Atkinson, S. R. Long

Paleotemperatures in the Southwestern United States Derived from Noble Gases in Ground Water
M. Stute, P. Schlosser, J. F. Clark, W. S. Broecker

Geothermal Evidence from Canada for a Cold Period Before Recent Climatic Warming K. Wang and T. J. Lewis

Stress Diffusion Along the San Andreas Fault at Parkfield, California P. E. Malin and M. G. Alvarez


Order and Low Dimensionality in the Organic Superconductor (BEDT-TTF)_2Cu(NCS)_2 Revealed by STM R. Fainchtein, S. T. D'Arcangelis, S. S. Yang, D. O. Cowan

Interaction Cloning: Identification of a Helix-Loop-Helix Zipper Protein That Interacts with c-Fos M. A. Blanal and W. J. Rutter

Fast Perceptual Learning in Visual Hyperacuity T. Poggio, M. Fahle, S. Edelman

Synaptotagmin: A Calcium Sensor on the Synaptic Vesicle Surface N. Brose, A. G. Petrenko, T. C. Südhof, R. Jahn

High-Frequency Network Oscillation in the Hippocampus G. Buzsáki, Z. Horváth, R. Urioste, J. Hetke, K. Wise

Acquisition of Myogenic Specificity by Replacement of Three Amino Acid Residues from MyoD into E12 R. L. Davis and H. Weintraub

A Site on Rod G Protein α Subunit That Mediates Effector Activation H. M. Rarick, N. O. Artemyev, H. E. Hamm

SPECIAL BOOK SECTION

1012 Scanning tunneling microscopy of organic superconductors

Indicates accompanying News story or Perspective

© 1992 American Association for the Advancement of Science. All rights reserved. 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.