



212 & 213

Scientific study of violence

POLICY FORUM

Rational Science, Irrational Reality: A Congressional Perspective on Basic Research and Society 200
G. E. Brown, Jr.

NEWS & COMMENT

R&D Budget Collides With the Deficit 208
Top HHS Lawyer Seeks to Block NIH 209
What the Patent Office Report Says
Did Political Clout Win Vaccine Trial for MicroGeneSys? 211

HHS 'Violence Initiative' Caught in a Crossfire 212
Violence Epidemiologists Test the Hazards of Gun Ownership 213

RESEARCH NEWS

The Brain Remaps Its Own Contours 216
Spinal Cord Injuries: New Optimism Blooms for Developing Treatments 218
Unorthodox Treatment Stirs Controversy
A Revisionist Timetable for the Ice Ages 220

Deep-Living Microbes Mount a Relentless Attack on Rock 222

PERSPECTIVES

FOCUS ON NEUROSCIENCE

Dividing Up the Neocortex 237
C. J. Shatz
Circadian Clock Genes Are Ticking 238
J. S. Takahashi
Ion Channel Structure and Function 240
C. Miller
Bench to Bedside: The Glutamate Connection 241
D. W. Choi
Are Adult Learning Mechanisms Also Used for Development? 243
E. R. Kandel and T. J. O'Dell

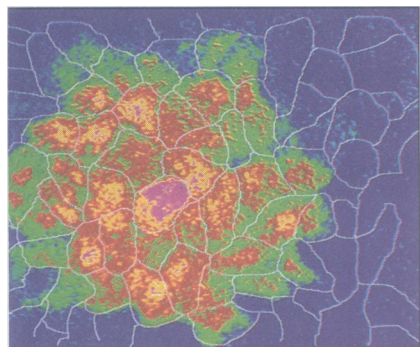
The Physiology of Memory: Recordings of Things Past 245
R. Desimone

ARTICLES

Continuous 500,000-Year Climate Record from Vein Calcite in Devils Hole, Nevada 255
I. J. Winograd, T. B. Coplen, J. M. Landwehr, A. C. Riggs, K. R. Ludwig, B. J. Szabo, P. T. Kolesar, K. M. Revesz

DEPARTMENTS

THIS WEEK IN SCIENCE	197	MEETINGS	321
EDITORIAL	199	Gordon Research Conferences: A. M. Cruickshank	
The Dimensions of the Brain		BOOK REVIEWS	333
LETTERS	203	A Scientist's Voice in American Culture, reviewed by T. Alborn • Framing Disease, P. Conrad • The Early Observable Universe from Diffuse Backgrounds, G. Mathews • Ferroelectric Liquid Crystals, H. Pleiner	
SCIENCESCOPE	207	PRODUCTS & MATERIALS	345
RANDOM SAMPLES	223		



Mechanism of propagation of calcium waves

292

AAAS Board of Directors

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

Florence P. Haseltine
Alan Schriesheim
Jean'ne M. Shreeve
Chang-Lin Tien
Warren M. Washington

William T. Golden
Treasurer
Richard S. Nicholson
Executive Officer

John Abelson
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. Choi

John M. Coffin
Bruce F. Eldridge
Paul T. Englund
Richard G. Fairbanks
Douglas T. Fearon
Harry A. Fozzard
Victor R. Fuchs
Theodore H. Geballe
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. Levinger III
Harvey F. Lodish
Richard Losick
Anthony R. Means

Mortimer Mishkin
Roger A. Nicoll
William H. Orme-Johnson III
Stuart L. Pimm
Yeshayau Pocker
Dennis A. Powers
Ralph S. Quatranio
V. Ramanathan
Douglas C. Rees
Erkki Ruoslahti
Ronald H. Schwartz

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