



COVER Three-dimensional reconstructions of the cerebral cortex of a rat, viewed from behind. Colored symbols indicate retrovirally labeled neurons that form five clones. The three orange cells and the three green cells represent two widely dispersed neuronal clones, both extending over large cortical distances. See page 434. [Photograph by C. Walsh]

## Reports

- 441 The Widespread Distribution of a Novel Silica Polymorph in Microcrystalline Quartz Varieties: P. J. HEANEY AND J. E. POST
- 443 Shocked Quartz at the Triassic-Jurassic Boundary in Italy: D. M. BICE, C. R. NEWTON, S. MCCAULEY, P. W. REINERS, C. A. MCROBERTS
- 446 Optically Transparent, Electrically Conductive Composite Medium: S. JIN, T. H. TIEFEL, R. WOLFE, R. C. SHERWOOD, J. J. MOTTINE, JR.
- 448 Sporogonic Development of a Malaria Parasite in Vitro: A. WARBURG AND L. H. MILLER
- 450 Polymerase II Promoter Activation: Closed Complex Formation and ATP-Driven Start Site Opening: W. WANG, M. CAREY, J. D. GRALLA
- 453 DNA Binding Activity of Recombinant SRY from Normal Males and XY Females: V. R. HARLEY, D. I. JACKSON, P. J. HEXTALL, J. R. HAWKINS, G. D. BERKOVITZ, S. SOCKANATHAN, R. LOVELL-BADGE, P. N. GOODFELLOW
- 456 Protection of Macaques Against SIV Infection by Subunit Vaccines of SIV Envelope Glycoprotein gp160: S.-L. HU, K. ABRAMS, G. N. BARBER, P. MORAN, J. M. ZARLING, A. J. LANGLOIS, L. KULLER, W. R. MORTON, R. E. BENVENISTE
- 459 Modulation of Activity of the Promoter of the Human *MDR1* Gene by Ras and p53: K.-V. CHIN, K. UEDA, I. PASTAN, M. M. GOTTESMAN
- 462 GnRH-Induced  $Ca^{2+}$  Oscillations and Rhythmic Hyperpolarizations of Pituitary Gonadotropes: A. TSE AND B. HILLE
- 464 Predicted Structural Similarities of the DNA Binding Domains of c-Myc and Endonuclease Eco RI: T. D. HALAZONETIS AND A. N. KANDIL
- 467 Aromatase Enzyme Activity and Sex Determination in Chickens: A. ELBRECHT AND R. G. SMITH
- 470 High Probability Opening of NMDA Receptor Channels by L-Glutamate: C. E. JAHR
- 472 Axon Guidance by Gradients of a Target-Derived Component: H. BAIER AND F. BONHOEFFER

## Inside AAAS

- 477 To Witness and Heal: What Science Can Do to Respond to Human Rights Abuse ■ Congress Boosts Funding for Science ■ AAAS Fellow Nominations ■ 1992 AAAS Dues ■ AAAS Award Winners

## Book Reviews

- 480 Free To Be Foolish, reviewed by R. BAYER ■ Secret Agenda, A. BEYERCHEN ■ Some Other Books of Interest ■ Vignettes: Earth Health ■ Books Received

## Products & Materials

- 484 Ultraviolet Cross-Linker ■ NMR Spectrometer ■ Miniblotter ■ Surface Protector ■ Protein Sequencer ■ Low Profile Refrigerated Circulator ■ Particle Delivery System ■ Literature

### Board of Directors

Donald N. Langenberg  
*Retiring President,  
Chairman*

Leon M. Lederman  
*President*

F. Sherwood Rowland  
*President-elect*

Mary Ellen Avery  
Francisco J. Ayala  
Eugene H. Cota-Robles  
Robert A. Frosch  
Joseph G. Gavin, Jr.  
Florence P. Hasetline  
Jean'ne M. Shreeve  
Warren M. Washington

William T. Golden  
*Treasurer*

Richard S. Nicholson  
*Executive Officer*

### Editorial Board

Charles J. Arntzen  
Elizabeth E. Bailey  
David Baltimore  
William F. Brinkman  
E. Margaret Burbidge  
Pierre-Gilles de Gennes  
Joseph L. Goldstein  
Mary L. Good  
Harry B. Gray  
John J. Hopfield  
F. Clark Howell  
Paul A. Marks  
Yasutomi Nishizuka  
Helen M. Ranney  
Robert M. Solow  
Edward C. Stone  
James D. Watson

### Board of Reviewing Editors

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  
Charles R. Cantor  
C. Thomas Caskey  
Dennis W. Choi  
John M. Coffin  
Bruce F. Eldridge  
Paul T. Englund  
Fredric S. Fay  
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  
Konrad B. Krauskopf  
Michael LaBarbera  
Charles S. Levings 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  
Raiph S. Quatrano  
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  
William B. Wood  
Keith Yamamoto