Editorial

Cassette Principles

Letters


Perspective

The Regulation of ACTH Secretion by IL-1: M. D. Lumpkin

Policy Forum


News & Comment

Progress on a Chemical Arms Treaty
Slowdown for French Fast Breeders?
A Scientist Back at the Helm of Unesco?
Engineers Hear a Competitive Parable
Feathers Still Fly in Row over Fossil Bird
Koryagin Skeptical on Glasnost
Science Committee Okays Supercollider
NSF Official’s Finances Probed by Justice

Research News

Sunspot-Weather Correlation Found
The 1987 Nobel Prize for Physics
Measuring Cholesterol Is as Tricky as Lowering It
Antibody Research Garners Nobel Prize

Articles

Computer-Aided Molecular Design: J. A. McCammon
New Perspectives in Cell Adhesion: RGD and Integrins: E. Ruoslahti and M. D. Pierschbacher

Research Articles

Clathrin Requirement for Normal Growth of Yeast: S. K. Lemmon and E. W. Jones

Reports

Cover Early morning launching of a 138,000-cubic-meter polyethylene balloon by the Air Force Geophysical Laboratory, 28 February 1984, at Alamogordo, New Mexico. Filter sampling equipment was flown on the balloon for the Environmental Measurements Laboratory, Department of Energy, to retrieve nuclear reactor ablation aerosol from the burnup of Cosmos 1402 at 36 kilometers. See page 512. [Official U.S. Air Force Photograph]

514 X-ray Holograms at Improved Resolution: A Study of Zymogen Granules: M. Howells, C. Jacobsen, J. Kirz, R. Feder, K. McQuaid, S. Rothman


519 Release of Multiple Hormones by a Direct Action of Interleukin-1 on Pituitary Cells: E. W. Berntson, J. E. Beach, J. W. Holaday, R. C. Smallridge, H. G. Fein

522 Interleukin-1 Stimulates the Secretion of Hypothalamic Corticotropin-Releasing Factor: R. Sapolsky, C. Rivier, G. Yamamoto, P. Plootsky, W. Vale

524 Corticotropin-Releasing Factor—Producing Neurons in the Rat Activated by Interleukin-1: F. Berkenbosch, J. van Oers, A. Del Rey, F. Tilders, H. Besedovsky

527 Model Substrates for an RNA Enzyme: W. H. McClain, C. Guerrieri-Takada, S. Altman

530 Recombinant Fragment of Protein Kinase Inhibitor Blocks Cyclic AMP–Dependent Gene Transcription: J. R. Grove, D. J. Price, H. M. Goodman, J. Avruch


536 Mutations in Diphtheria Toxin Separate Binding from Entry and Amplify Immunotoxin Selectivity: L. Greenfield, V. G. Johnson, R. J. Youle


542 A Cytoplasmic Protein Stimulates Normal N-ras p21 GTPase, but Does Not Affect Oncogenic Mutants: M. Trahey and F. McCormick


548 Nuclear Reassembly Excludes Large Macromolecules: J. A. Swanson and P. L. McNeil

Technical Comments

550 Quick-Freeze Lipid Techniques: Correction: D. L. Melchor • Negative Poison's Ratio Materials: S. Burns; R. Lakes

Book Reviews

556 Brought to Bed, reviewed by S. Reverby • Plant Ecology, R. B. Primack • Pollen and Spores, J. A. Doyle • The Quantum Universe: O. W. Greenberg • Some Other Books of Interest • Books Received

Products & Materials

560 Preparative HPLC System • Benchtop Bioreactor Chromatography Gradient Systems • Radiation Shield for Computer Monitors • Multiple-User Gamma Counter • Nonradioactive Labeling of DNA Probes • Multitasking Open-Architecture Computer • Automated AA Spectrometer • Literature