1487 This Week in Science

Editorial

1489 Science Advice to the President

Letters


News & Comment

1497 Conflict of Interest Eyed at Harvard
1499 NIH Panel Finds No Fraud in Cell Paper but Cites Errors “Fifth Force” Update: More Tests Needed
1500 UCSF Wins Round in Fight over Lab DOE’s Guide to Weapons Plant Spills
1501 Furor in Fusion Labs
1502 Gene Transfer Test Back on Track AIDS Mice Die in NIH Accident
1503 Marine Mammals Join the Navy

Research News

1505 Which Clot-Dissolving Drug Is Best?
1507 Computer Search Solves an Old Math Problem
1508 Extinction Imminent for Native Plants
1509 Sex and Violence in Neuroscience: Sex Hormones Linked to Task Performance • More Dimensions for Glutamate Toxicity • Cells Commit Suicide Without Growth Factors
1511 New Active Faults in L.A.

Articles

1513 The Global Impact of the Chernobyl Reactor Accident: L. R. Anspaugh, R. J. Catlin, M. Goldman
1519 Chemistry of High-Temperature Superconductors: A. W. Sleight

Research Articles


Reports

1535 The Isotopic Composition of Methane in Polar Ice Cores: H. Craig, C. C. Chou, J. A. Welhan, C. M. Stevens, A. Engelmear
1539 Dynamics of a Second-Order Phase Transition: PT to II Phase Transition in Anorthite, Ca₃Al₂Si₂O₈: S. Ghose, G. Van Tendeloo, S. Amelinckx
cover  Three stages in the embryogenesis of the ascidian Boltenia villosa. Upper left: fertilized egg, 30 minutes after sperm penetration. The endogenous orange pigment, which was uniformly distributed in the unfertilized egg, has formed a cap at the vegetal pole. Center: two-cell stage, 120 minutes after fertilization. Lower right: gastrula, 13 hours after fertilization. The pigment has segregated into muscle-lineage cells, which line the posterior rim of the blastopore. See page 1572. [L. Simoncini, M. L. Block, W. J. Moody, Department of Zoology, University of Washington, Seattle, WA 98195]

1544  Translation of Unspliced Transcripts After Heat Shock: H. J. Yost and S. Lindquist
1551  Competitive Inhibition of hsp70 Gene Expression Causes Thermosensitivity: R. N. Johnston and B. L. Kucey
1554  Unexpectedly High Levels of HIV-1 RNA and Protein Synthesis in a Cytocidal Infection: M. Somasundaran and H. L. Robinson
1557  Human T Cell Leukemia Viruses Use a Receptor Determined by Human Chromosome 17: M. A. Sommerfelt, B. P. Williams, P. R. Clapham, E. Solomon, P. N. Goodfellow, R. A. Weiss
1559  A DNA Binding Protein Regulated by IL-4 and by Differentiation in B Cells: M. Boothby, E. Gravalles, H.-C. Liou, L. H. Glimcher
1570  The elav Gene Product of Drosophila, Required in Neurons, Has Three RNP Consensus Motifs: S. Robinow, A. R. Campos, K.-M. Yao, K. White
1572  Lineage-Specific Development of Calcium Currents During Embryogenesis: L. Simoncini, M. L. Block, W. J. Moody
1578  Evidence That the M2 Membrane-Spanning Region Lines the Ion Channel Pore of the Nicotinic Receptor: R. J. Leonard, C. G. Labarca, P. Charnet, N. Davidson, H. A. Lester

Book Reviews

1583  Sexual Selection, reviewed by R. Gibson  The Cold Light of Dawn, D. E. Osterbrock  Superstrings, B. Ovrut  Some Other Books of Interest

Products & Materials

1588  Imaging Workstation  Electrophoretic Power Supplies  Immobilized Recombinant Protein G  Plotting Software  Nucleic Acid Photodocumentation System  Amino Acid Analyzer  Cytometer  Literature