This Week in Science

Editorial

Pork Barrel "Science": RICHARD S. NICHOLSON

Letters


ScienceScope

1443 More funds for deep sea and EMF research; Iran bails out physics center; etc.

News & Comment

1444 Biological Immigrants Under Fire "Superbug" Attacks California Crops A Rouge's Gallery of Pests

Research News

1450 Depression: The News Isn't Depressing Imprinting Depression on the Brain

1452 The Case of the Unlikely Molecular Twins

1454 Planet X: Going, Going ... But Not Quite Gone

1455 Putting New Muscle Into Gene Therapy

1456 Coming up Short in a Crustal Quest

1457 Excess Genetic Baggage Dumped

1458 Disappearing Mushrooms: Another Mass Extinction?

1459 Briefings: Super Network Authorized Paint That Reveals SSC Magnets Upgraded Japan Fellowships Going Begging

Perspective

1462 How Does III × II Make U?: J. E. DAHLBERG AND E. LUND

Articles

1467 Subterranean Waterworks of Biblical Jerusalem: Adaptation of a Karst System: D. GILL

1471 The Atom Economy-A Search for Synthetic Efficiency: B. M. TROST

Research Article

1478 Photoreceptor Deactivation and Retinal Degeneration Mediated by a Photoreceptor-Specific Protein Kinase C: D. P. SMITH, R. RANGANATHAN, R. W. HARDY, J. MARX, T. TSUCHIDA, C. S. ZUKER

Reports

COVER The Hawaiian sepiolid squid *Euprymna scolopes* uses the luminescence of bacterial symbionts in its nocturnal behavior. This ventral dissection (the squid is ~3.5 centimeters in length) reveals the light-emitting organ as a complex, bilobed structure in the center of the mantle cavity. Normal light-organ development is initiated by specific strains of *Vibrio fischeri*. See page 1491. [Photograph by William Ormerod, University of Southern California]


1489 Phase Transformations in Carbon Fullerenes at High Shock Pressures: C. S. Yoo and W. J. Nellis

1491 Symbiotic Recognition and Subsequent Morphogenesis as Early Events in an Animal-Bacterial Mutualism: M. J. McFall-Ngai and E. G. Ruby

1494 Selective Cleavage of Human DNA: RecA-Assisted Restriction Endonuclease (RARE) Cleavage: L. J. Ferrin and R. D. Camerini-Otero

1497 Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide: P. E. Nielsen, M. Egholm, R. H. Berg, O. Buchardt

1500 Type-Specific Regulation of Adenylyl Cyclase by G Protein βγ Subunits: W.-J. Tang and A. G. Gilman

1503 A Requirement for the Intercellular Messenger Nitric Oxide in Long-Term Potentiation: E. M. Schuman and D. V. Madison

1507 Systemic Delivery of Recombinant Proteins by Genetically Modified Myoblasts: E. Barr and J. M. Leiden


1512 Regulation of Phagocyte Oxygen Radical Production by the GTP-Binding Protein Rac 2: U. G. Knaus, P. G. Heyworth, T. Evans, J. T. Curnutte, G. M. Bokoch


1518 Functional Contribution of Neuronal AChR Subunits Revealed by Antisense Oligonucleotides: M. Listerud, A. B. Brussaard, P. Devay, D. R. Colman, L. W. Role


Book Reviews

1528 Fantastic Archaeology, reviewed by W. H. Goetzmann ■ Physics as a Calling, J. A. Johnson ■ Quantized Vortices in Helium II, L. J. Campbell ■ Some Other Books of Interest ■ Books Received

Products & Materials

1533 Stopped-Flow Spectrofluorimeter ■ Self-Recirculating Electrophoresis System ■ Ultraviolet Radiation Meter ■ Monoclonal Antibodies ■ Water Dispenser Gun ■ Direct Blotter ■ Protein Structure Database ■ Literature