This Week in Science

Editorial

Technology for America's Future

Letters


ScienceScope

Sweeping overhead rates under the rug; gambling with Poker Flat science; etc.

News & Comment

Baltimore Throws in the Towel ■ David Baltimore's Mea Culpa
The True Source of HIV?
Science Under Wraps in Prince William Sound
Science Academy Elects New Members
Briefings: Hidden Costs of the Space Station ■ A Big Gift from Big Oil ■ A Billion Bucks for Materials ■ Congressional Day ■ Ten Years for the Brain ■ Cuban AIDS Control ■ Biotechnology Execs Earn More ■ Correction

Research News

Engineering Dogma Gives Way to Chaos ■ Flying High with Chaos Control
A New Ball Game in Nuclear Physics
How Peptide Hormones Get Ready for Work
Praying Mantises Play Top Gun
Sex and the Single Gene
Deep Rocks Stir the Mantle Pot

Articles

Reproductive Behavior and Health in Consanguineous Marriages: A. H. Bittles, W. M. Mason, J. Greene, N. A. Rao
Neutron Scattering: Progress and Prospects: J. D. Axe
Diversity of G Proteins in Signal Transduction: M. I. Simon, M. P. Strathmann, N. Gautam

Research Articles

Zinc Finger–DNA Recognition: Crystal Structure of a Zif268-DNA Complex at 2.1 Å: N. P. Pavletich and C. O. Pabo
A New Cofactor in a Prokaryotic Enzyme: Tryptophan Tryptophylquinone as the Redox Prosthetic Group in Methylamine Dehydrogenase: W. S. McIntire, D. E. Weemier, A. Chistoserdov, M. E. Lidstrom

SCIENCE (ISSN 0036-8075) is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Second-class postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 1991 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription ($1 issues): $82 ($50 allocated to subscription). Domestic institutional subscription ($1 issues): $150. Foreign postage extra: Canada $46, other (surface mail) $46, air freight $90. First class, airmail, school-year, and student rates on request. Change of address: allow 6 weeks, giving old and new addresses and 11-digit account number. Postmaster: Send change of address to Science, P.O. Box 1723, Riverton, NJ 08077. Single copy sales: $6.00 per issue prepaid includes surface postage, Guide to Biotechnology Products and Instruments, $20. Bulk rates on request. Authorization to photocopy material for internal or personal use under circumstances not falling within the fair use provisions of the Copyright Act is granted by AAAS to libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of $1 per copy plus $0.10 per page is paid directly to CCC, 27 Congress Street, Salem, Massachusetts 01970. The identification code for Science is 0036-8075/83 $1 + .10. Science is indexed in the Reader's Guide to Periodical Literature and in several specialized indexes.

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objectives are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, to advance education in science, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.
COVER  Crystal structure of a zinc finger–DNA complex from the mouse protein Zif268. The view is down the axis of the double-helical DNA and emphasizes the symmetry of the complex. The DNA is blue; individual zinc finger domains are red, yellow, and purple; and zinc atoms are light blue. Similar DNA-binding domains occur in a large family of eukaryotic regulatory proteins. See page 809. [Photograph by N. P. Pavletich and C. O. Pabo]

827 Ultradeep (>300 Kilometers) Ultramafic Xenoliths: Petrological Evidence from the Transition Zone: V. SAUTTER, S. E. HAGGERTY, S. FIELD
830 In Situ Biodegradation: Microbiological Patterns in a Contaminated Aquifer: E. L. MADSEN, J. L. SNCLAIR, W. C. GHIORSE
833 Control of doublesex Alternative Splicing by transformer and transform-er-2 in Drosophila: K. HOSHIIJIMA, K. INOUE, I. HIGUCHI, H. SAKAMOTO, Y. SHIMURA
836 Solution Structure of FKBP, a Rotamase Enzyme and Receptor for FK506 and Rapamycin: S. W. MICHNICK, M. K. ROSEN, T. J. WANDLESS, M. KARPLUS, S. L. SCHREIBER
842 HBV X Protein Alters the DNA Binding Specificity of CREB and ATF-2 by Protein-Protein Interactions: H. F. MAGUIRE, J. P. HOFELER, A. SIDDIQI
844 Inhibition of PDGF β Receptor Signal Transduction by Coexpression of a Truncated Receptor: H. UENO, H. COLBERT, J. A. ESCOBEDO, L. T. WILLIAMS
848 FTZ-F1, a Steroid Hormone Receptor–Like Protein Implicated in the Activation of fushi tarazu: G. LAVORGNA, H. UEDA, J. CLOS, C. WU
851 Ca2+ Permeability of KA-AMPA-Gated Glutamate Receptor Channels Depends on Subunit Composition: M. HOLLMANN, M. HARTLEY, S. HEINEMANN
856 Identification of a Peptide Specific for Aplysia Sensory Neurons by PCR-Based Differential Screening: J.-F. BRUNET, E. SHAPIRO, S. A. FOSTER, E. R. KANDEL, Y. INO

Technical Comment 860 Land Plants and Weathering: J. M. ROBINSON; R. A. BERNER

Book Reviews 863 Physical Chemistry from Ostwald to Pauling, reviewed by R. FRIEDEL  ▪ Meteorology in America, 1800–1870, B. SINCLAIR  ▪ Fundamentals of Molecular Evolution, M. T. CLEGGE ▪ Books Received

Products & Materials 866 Computer Vision Software ▪ Custom Peptide Synthesis ▪ Monoclonal Antibodies ▪ Sample Preparation Kits ▪ Tracking Software ▪ Phosphorylated Protein Enrichment Kit ▪ Molecular Biology Buffers and Reagents ▪ Literature
Editor's Summary

This copy is for your personal, non-commercial use only.

**Article Tools**  Visit the online version of this article to access the personalization and article tools:
http://science.sciencemag.org/content/252/5007

**Permissions**  Obtain information about reproducing this article:
http://www.sciencemag.org/about/permissions.dtl