This Week in Science

Editorial
9 Materials Research

Perspective
12 Applied Research: Key to Innovation: A. M. Clogston

Letters
14 Recombinant DNA: International Guidelines: H. I. Miller and F. E. Young
   [Growth Hormone Use: B. M. Sherman; W. Regelson] SDI Research
   Funds: G. D. Mostow] Net Primary Production: The Tomato Example:
   and Revolution: R. Rosin; D. E. Koshland, Jr.

News & Comment
17 End Game for the N Reactor?
19 Textbook Controversy Intensifies Nationwide] Romeo and Juliet and Youth
   Suicide
22 Creationism Case Argued Before Supreme Court
23 Use of Berkeley Reactor Questioned on Military-Related Research
24 Student Protests Block University Changes
26 Briefing: Feerst in Close Call] Stanford Branches Out] Human Values in
   Medical Schools] Peace Institute Grants] A $300-Million LINK

Research News
27 Free Electron Laser Success Explained
29 Planetary Scientists Are Seeing the Unseeable: More Clues to Asteroid–Dead
   Comet Connections] Mysterious Pluto May Shrink No Longer] IRAS Puts
   Astronomers Out of (One) Business] From Its Shape, a Look Inside Mimas
31 Rice Plants Regenerated from Protoplasts

Articles
33 The Volatility of Stock Market Prices: R. J. Shiller
46 Multiple Calcium Channels and Neuronal Function: R. J. Miller

Research Articles
53 Diversity of Alpha-Fetoprotein Gene Expression in Mice Is Generated by a
   Combination of Separate Enhancer Elements: R. E. Hammer, R. Krulak,
   S. A. Camper, R. L. Brinster, S. M. Tilghman

Reports
59 A Revisit to the Guest Star of A.D. 185: Y.-L. Huang and
   G. H. Moriarty-Schievan
61 Trace Fossil Evidence for Late Ordovician Animals on Land: G. J. Retallack
   and C. R. Feakes

---

SCIENCE is published weekly on Friday, except the last week in December, and with an extra issue in February
by the American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Sec-
ond-class postage (publication No. 464400) paid at Washington, DC, and at an additional entry. Now combined with The
Scientific Monthly’s Copyright © 1986 by the American Association for the Advancement of Science. The title SCI-
ENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (51 issues): $65. Do-
mestic institutional subscription (51 issues): $90. Foreign postage extra: Canada $32, other (surface mail) $27, air-sur-
face via Amsterdam $55. First class, airmail, school-year, and student rates on request. Single copies $2.50 ($3 by mail); back
issues $4 ($4.50 by mail); Biotecnology issue, $5.50 ($6 by mail); classroom rates on request; Guide to Biotech-
nology Products and instruments $16 ($17 by mail). Change of address: allow 6 weeks, giving old and new addresses
and seven-digit account number. 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, 21 Congress Street, Salem, Massachusetts 01970. The identification code
for Science is 0036-8075/83 $1 + .10. Postmaster: Send Form 3579 to Science, 1333 H Street, NW, Washington, DC
20005. 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 objects
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 public welfare, and to increase public understanding and ap-
preciation of the importance and promise of the methods of science in human progress.
Environmental Trends in Extinction During the Paleozoic: J. J. Sepkoski, Jr.

Delayed Transneuronal Death of Substantia Nigra Neurons Prevented by γ-Aminobutyric Acid Agonist: M. Saji and D. J. Reis


Decreased Hippocampal Inhibition and a Selective Loss of Interneurons in Experimental Epilepsy: R. S. Sloviter

Mapping the Main Immunogenic Region and Toxin-Binding Site of the Nicotinic Acetylcholine Receptor: T. Barras, A. Mauron, B. Roth, C. Alliod, S. J. Tzartos, M. Ballivet

Increased Numbers of Ion Channels Promoted by an Intracellular Second Messenger: R. Gunning

Cloned Gene of Rictektsia rickettsii Surface Antigen: Candidate Vaccine for Rocky Mountain Spotted Fever: G. A. McDonald, R. L. Anacker, K. Garjian

Unique Forms of the abl Tyrosine Kinase Distinguish Ph1-Positive CML from Ph1-Positive ALL: S. S. Clark, J. McLaughlin, W. M. Crist, R. Champlin, O. N. Witte


1986 Election Results ■ Transcripts of Discussion Focusing on the Use of Animals in Research Offered ■ Nomination of AAAS Fellows Invited ■ SWARM to Meet in Austin ■ 1987 Calendar of Scientific Meetings Available


Colloidal Gold Probes ■ Statistical Software ■ DNA Sequencing Apparatus ■ Expandable Analyzer ■ Automatic Peptide Synthesizer ■ Technical Word Processing Software ■ Literature