This Week in Science

1041 The Challenge to U.S. Competitiveness: ROBERT M. WHITE

1043 What Myosin Might Do: F. SOLOMON

Randomized Response Technique: A. A. CAMPBELL ■ Risk Perception:
T. P. SHEHEN ■ Cancer Control: J. C. BAILAK III; E. CHELINSKY ■ Foreign
Engineering Students: M. GILKESON

Ozone Plan Splits Administration 1052
Regulating Pesticides: The “Delaney Paradox” 1054
PHS Revitalization Plan Stirs Up NIH 1055
Ariane, Shuttle Delayed Again 1056
Fraud Caseillance 1057
Prosecution Urged In Fraud Case 1058

Briefing: Madagascar Is the Focus of Habitat Project ■ Overhaul Recommended
for British Geology ■ Congress to Weigh Animal Patents ■ IBM to Give Cornell
a $20-Million Computer ■ A Warning on Oil Imports ■ Vaccine Test
Okayed

Leukemia Virus Linked to Nerve Disease 1059
The Earliest “Humans” Were More Like Apes 1061
An Oxygen Key to the New Superconductors: Where the Oxygen Vacancies Are
Vacancy Ordering and Superconductivity ■ Oxygen Isotopes Spell Trouble for
Phonons

Managing the Soils of Sub-Saharan Africa: R. LAL 1069
Freezing: A. D. J. HAYMET

Antisense RNA Inactivation of Myosin Heavy Chain Gene Expression in
Dictyostelium discoideum: D. A. KNECHT AND W. F. LOOMIS 1081
Disruption of the Dictyostelium Myosin Heavy Chain Gene by Homologous
Recombination: A. DE LOZANNE AND J. A. SPUDICH

Observation of Phase Transitions in Spreading Activation Networks: J. SHRAGER,
T. HOGG, B. A. HUBERMAN

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-
dond-class postage (publication No. 494460) paid at Washington, DC, and at an additional entry. Now combined with The
Scientific Monthly's Copyright © 1987 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): $96. Foreign postage extra: Canada $32, other (surface mail) $27, air-surface
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); Biotechnology 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 page
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 human welfare, and to increase public understanding and ap-
preciation of the importance and promise of the methods of science in human progress.
Multinucleated cells of *Dictyostelium discoideum* cells that arise when cytokinesis is impaired by the lack of myosin heavy chain protein. The bright spots are nuclei fluorescently stained with the DNA binding dye Hoechst 33258 after fixation of the cells. The phenotype was produced by transforming cells with a vector that encodes myosin heavy chain antisense RNA. See pages 1081 and 1086.

[D. A. Knecht and W. F. Loomis, University of California San Diego, La Jolla, CA 92093]


1098 Herbivory in Rocks and the Weathering of a Desert: M. Shachak, C. G. Jones, Y. Granot


1110 Human Cerebral Hemispheres Develop at Different Rates and Ages: R. W. Thatcher, R. A. Walker, S. Judice

1114 *Aedes albopictus* in North America: Probable Introduction in Used Tires from Northern Asia: W. A. Hawley, P. Reiter, R. S. Copeland, C. B. Pumplin, G. B. Craig, Jr.


Book Reviews

1125 The Evolution of Human Behavior, reviewed by R. S. O. Harding ■ Phosphate Deposits of the World, P. Cloud ■ Fjords, B. F. Molnia ■ Aeolian Geomorphology, N. Lancaster ■ Books Received

Software Reviews

1128 The ASYST Software for Scientific Computing: D. Hary, K. Oshio, S. D. Flanagan