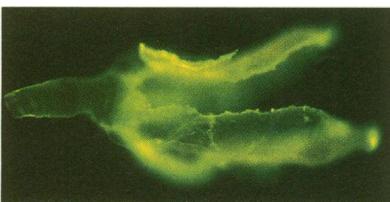




1812

Leishmania adhesion
in the sandfly gut



POLICY FORUM

- The Safety of Foods Developed by Biotechnology 1747

D. A. Kessler, M. R. Taylor, J. H. Maryanski, E. L. Flamm, L. S. Kahl

NEWS & COMMENT

- Lightning Strikes the SSC 1752

- Controversial Contraceptive Wins Approval from FDA Panel 1754

- JET Strike Hits Brussels 1755

- New Plant Institute Recommended 1755

- Space Cooperation: U.S. and Russia Proceed Cautiously 1756

- Budget Ax Lops Off Entire Departments at San Diego 1757

RESEARCH NEWS

- Motor Molecules on the Move 1758

- Astronomers Bag Another Black Hole 1760

- A New Discipline Probes Suicide's Multiple Causes 1761

- Galileo Gets a Boost; UARS Goes Bust 1762

- Chaos Breaks Out at NIH, But Order May Come of It 1763

- A New Blueprint for Water's Architecture 1764

PERSPECTIVE

- Another Piece of the HIV Puzzle Falls into Place 1766

A. Wlodawer

ARTICLE

- Paleoclimatic Signature in Terrestrial Flood Deposits 1775

C. E. Koltermann and S. M. Gorelick

DEPARTMENTS

THIS WEEK IN SCIENCE

1739

EDITORIAL

1741

Fetal Tissue Research

LETTERS

1743

DNA Fingerprint Matches: P. J. Sullivan; N. Risch and B. Devlin; B. Budowle

SCIENCESCOPE

1751

Scoping out NSF's international partners, etc.

RANDOM SAMPLES

1765

Less Laissez-Faire in French Gene-Splicing? • The Worm Turned Out • Scientific Minority-

Womanpower • Awards in Biomedicine..., etc.

INSIDE AAAS

1834

AAAS Annual Election: Preliminary Announcement

BOOK REVIEWS

1836

Ultra-Cold Neutrons, reviewed by G. L. Greene • *Autonomic Neuroeffector Mechanisms*, P. Smith • *The Changing Visual System*, R. Shapley • *Population Dynamics and the Tribolium Model*, M. Leibold • *Vignettes: Nature Stories* • Books Received

PRODUCTS & MATERIALS

1840

AAAS Board of Directors

Leon M. Lederman
Retiring President,
Chairman
F. Sherwood Rowland
President
Eloise E. Clark
President-elect
Mary Ellen Avery
Francisco J. Ayala
Robert A. Frosch

Florence P. Haseltine
Alan Schriesheim
Jeanne M. Shreeve
Chang-Lin Tien
Warren M. Washington
William T. Golden
Richard S. Nicholson
Executive Officer

John Abelson
Frederick W. Alt
Don L. Anderson
Stephen J. Benkovic
David E. Bloom
Floyd E. Bloom
Henry R. Bourne
James J. Bull
Kathryn Calame
C. Thomas Caskey
Dennis W. Choi

John M. Coffin
Bruce F. Eldridge
Paul T. Englund
Richard G. Fairbanks
Douglas T. Fearon
Harry A. Fozard
Victor R. Fuchs
Theodore H. Geballe
Margaret J. Geller
John C. Gerhart
Roger I. M. Glass

Stephen P. Goff
Corey S. Goodman
Stephen J. Gould
Ira Herskowitz
Eric F. Johnson
Stephen M. Kosslyn
Michael LaBarbera
Charles S. Levings III
Harvey F. Lodish
Richard Losick
Anthony R. Means

Mortimer Mishkin
Roger A. Nicoll
William H. Orme-Johnson III
Stuart L. Pimm
Yeshayau Pocker
Dennis A. Powers
Ralph S. Quatrano
V. Ramanathan
Erkki Ruoslahti
Ronald H. Schwartz
Terrence J. Sejnowski

Thomas A. Steitz
Richard F. Thompson
Robert T. N. Tjian
Emil R. Unanue
Geerat J. Vermaij
Bert Vogelstein
Harold Weintraub
Zena Werb
George M. Whitesides
Owen N. Witte
Keith Yamamoto

Board of Reviewing Editors

COVER

Agrobacterium tumefaciens VirE2 protein (fused to the β -glucuronidase reporter protein, which generates the blue stain) accumulates in the nucleus of a tobacco cell. VirE2, a single-stranded DNA binding protein that associates with *Agrobacterium* T-strand DNA, is pro-

posed to target this DNA directly into the plant nucleus during infection. See page 1802. Insight into how *Agrobacterium* infects plants may lead to better control over transformation and bioengineering of plants. [Photomicrograph: J. Zupan]



RESEARCH ARTICLE

Crystal Structure at 3.5 Å Resolution □ 1783
of HIV-1 Reverse Transcriptase Complexed with an Inhibitor

L. A. Kohlstaedt, J. Wang, J. M. Friedman, P. A. Rice, T. A. Steitz

REPORTS

Luminescent Color Image Generation 1791
on Porous Silicon

V. V. Doan and M. J. Sailor

Energetics of Large Fullerenes: Balls, 1792
Tubes, and Capsules

G. B. Adams, O. F. Sankey, J. B. Page, M. O'Keeffe, D. A. Drabold

The Role of Solvent Viscosity in the 1796
Dynamics of Protein Conformational Changes

A. Ansari, C. M. Jones, E. R. Henry, J. Hofrichter, W. A. Eaton

Probing Protein Stability with Unnatural 1798
Amino Acids

D. Mendel, J. A. Ellman, Z. Chang, D. L. Veenstra, P. A. Kollman, P. G. Schultz

Nuclear Localization of *Agrobacterium* 1802
VirE2 Protein in Plant Cells

V. Citovsky, J. Zupan, D. Warnick, P. Zambryski

Overlapping But Nonidentical Binding 1805
Sites on CD2 for CD58 and a Second
Ligand CD59

W. C. Hahn, E. Menu, A. L. M. Bothwell, P. J. Sims, B. E. Bierer

Cytoplasmic Domain Heterogeneity and 1808
Functions of IgC Fc Receptors in B Lymphocytes

S. Amigorena, C. Bonnerot, J. R. Drake, D. Choquet, W. Hunziker, J.-G. Guillet, P. Webster, C. Sautes, I. Mellman, W. H. Fridman

Stage-Specific Adhesion of *Leishmania* 1812
Promastigotes to the Sandfly Midgut

P. F. P. Pimenta, S. J. Turco, M. J. McConville, P. G. Lawyer, P. V. Perkins, D. L. Sacks

Reversal of the Orientation of an Integral 1815
Protein of the Mitochondrial Outer Membrane

J.-M. Li and G. C. Shore

Peptides Presented to the Immune System 1817
by the Murine Class II Major Histocompatibility
Complex Molecule I-A^d

D. F. Hunt, H. Michel, T. A. Dickinson, J. Shabanowitz, A. L. Cox, K. Sakaguchi, E. Appella, H. M. Grey, A. Sette

Neurotransmitter Release from 1820
Synaptotagmin-Deficient Clonal Variants of
PC12 Cells

Y. Shoji-Kasai, A. Yoshida, K. Sato, T. Hoshino, A. Ogura, S. Kondo, Y. Fujimoto, R. Kuwahara, R. Kato, M. Takahashi

Involvement of the N-methyl D-aspartate 1823
(NMDA) Receptor in the Synapse Elimination
During Cerebellar Development

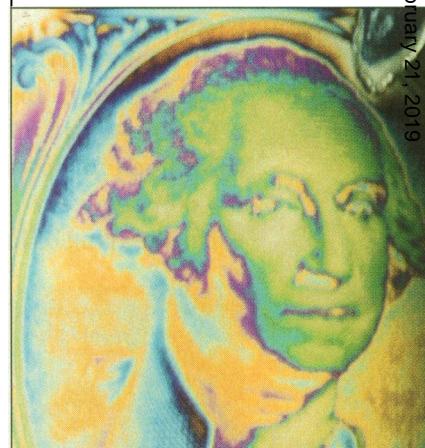
S. Rabacchi, Y. Bailly, N. Delhaye-Bouchaud, J. Mariani

TECHNICAL COMMENTS

Expression of Intra-MHC Transporter 1826
(HAM) Genes and Class I Antigens in Diabetes-
Susceptible NOD Mice

H. R. Gaskins, J. J. Monaco, E. H. Leiter, L. S. Wicker, P. L. Podolin, P. Fischer, A. Sirotina, R. C. Boltz, Jr., L. B. Peterson, D. Faustman, X. Li, H. Y. Lin, R. Huang, J. Guo

1791
Images in silicon



□ Indicates accompanying feature

■ 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 © 1992 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (51 issues): \$87 (\$47 allocated to subscription). Domestic institutional subscription (51 issues): \$195. Foreign postage extra: Mexico, Caribbean (surface mail) \$50; other countries (air assist delivery) \$95. First class, airmail, student and emeritus rates on request. Canadian rates with GST available upon request, GST #1254 88122. 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 2033, Marion, OH 43305-2033. 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, MA 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.

256 (5065)

Science 256 (5065), 1739-1840.

ARTICLE TOOLS

<http://science.scienmag.org/content/256/5065>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.