LETTERS

EDITORIAL
Philip Hauge Abelson

ARTICLES
A New Role for DNA Virus Early Proteins in Viral Carcinogenesis: A. M. Lewis, Jr., and J. L. Cook
The 1984 Nobel Prize in Economics: P. A. Samuelson
A Mammalian Host-Vector System That Regulates Expression and Amplification of Transfected Genes by Temperature Induction: D. C. Rio, S. G. Clark, R. Tjian
Discovery of New Variable Radio Sources in the Nucleus of the Nearby Galaxy Messier 82: P. P. Kronberg and R. A. Sramek

NEWS AND COMMENT
Pentagon Decision-Making Comes Under Fire
Troubles Plague Polish Physicists
Global Energy Study Under Fire
Zeolites Catalyze Patent Dispute
Briefing: Two Chilean Professors Released; Scientific Boycott Proposed to Aid Refugees; VA Re-considers Twin Study; Psychologist’s Suit Dismissed; Three Sites Short-Listed for Nuclear Waste Dump; AID Turns Down IPPF; Comings and Goings
NSF Readies New Engineering Program
Europeans Adopt R&D Plan

RESEARCH NEWS
Heart Panel's Conclusions Questioned
Geophysics Briefing: Old Faithful Not So Faithful Anymore; Prospects for Short-Term Earthquake Prediction; Seismic Reflections from the Deep Mantle; Caldera Watching Continues Here and Abroad; Strontium Isotope Dating Achieves Useful Precision
More Than a Planet, Almost a Star

BOARD OF DIRECTORS

CHAIRMEN AND SECRETARIES OF AAAS SECTIONS

MATHEMATICS (A) Gail S. Young
Gail S. Young

MATHEMATICS (B) Kolmogorov

SOCIAL, ECONOMIC, AND POLITICAL SCIENCES (K) Robin M. Williams, Jr.

PHYSICS (B) Rolf M. Schröder

PHYSICS (C) Fred W. McLafferty

PHYSICS (D) Patrick H. Emerick

PHYSICS (E) Donat G. Wentzel

PSYCHOLOGY (J) Gregory A. Kimble

PHARMAEUTICAL SCIENCES (S) Stuart Feldman

EDUCATION (Q) Marvin Dugger

PHARMACEUTICAL SCIENCES (S) David A. Knapp

DENTISTRY (R) Robert J. Fitzgerald

DENTISTRY (R) Stuart Feldman

DENTISTRY (R) David A. Knapp

EXECUTIVE SECRETARY Walter Gardner

EXECUTIVE DIRECTOR Alan E. Leventhal

Executive Director

EXECUTIVE DIOR Charles E. Holley, Jr.

EXECUTIVE DIR. M. Michelle B.

PACIFIC DIVISION

ARCTIC DIVISION

SOUTHWESTERN AND ROCKY MOUNTAIN DIVISION

SCIENCE is published weekly except the last week in December, by the American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Second-class postage (publication No. 484460) paid at Washington, D.C. and at an additional entry. The Scientific Monthly is copyright © 1984 by the American Association for the Advancement of Science. Domestic individual membership and subscription (51 issues): $58.65; institutional subscription (51 issues): $99. Foreign postage extra: Canada $24; other (surface mail): $37, air-surface via Amsterdam $65, First class, airmail, school-year, and student rates on request. Single copies $2.50 ($3 by mail); back issues $3 ($3.50 by mail); Biotechnology issue. $5 ($5.50 by mail); classroom rates on request. 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 provision 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.
AAAS NEWS

1984 Election Results; Membership Dues Increase; Proposals and Resolutions Invited for 1985 Council Meeting: Reminder—Help AAAS Membership Office Stop Repetition; Grants to Self-Sponsored Foreign Graduate Students to Attend 10th AAAS R&D Colloquium .................................................. 45

BOOK REVIEWS

Forces of Production, reviewed by D. Brody; Materials Science of the Earth's Interior, D. J. Weidner; Pyroclastic Rocks, D. W. Peterson; Wastes in the Ocean, G. Needle; Books Received ............................................. 47

REPORTS

Transformation of Amorphous Calcium Phosphate to Crystalline Dahllite in the Radular Teeth of Chitons: H. A. Lowenstam and S. Weiner .................... 51

Amazon Rain-Forest Fires: R. L. Sanford, Jr., et al. .................................. 53


Deepest Known Plant Life Discovered on an Uncharted Seamount: M. M. Littler et al. ............................................................. 57

Speciation and Stasis in Marine Ostracoda: Climatic Modulation of Evolution: T. M. Cronin ................................................................. 60

Direct Imaging of Live Human Platelets by Flash X-ray Microscopy: R. Feder et al. ................................................................. 63

Two Distinct Populations of Calcium Channels in a Clonal Line of Pituitary Cells: C. M. Armstrong and D. R. Matteson ............... 65

Peroxisomal Defects in Neonatal-Onset and X-Linked Adrenoleukodystrophies: S. Goldfischer et al. ................................................................. 67

Abrupt Induction of a Membrane Digestive Enzyme by Its Intraintestinal Substrate: A. M. Reisenaueur and G. M. Gray .................................................. 70

Enzyme Regulation in a Trypanosomatid: Effect of Purine Starvation on Levels of 3'-Nucleotidase Activity: M. Gottlieb ................................................................. 72


Technical Comments: Crystalline Form of Native Celluloses: J. J. Hebert; R. H. Atalla and D. L. VanderHart ................................................................. 79

COVER

Microscopic image of a fully hydrated and live human platelet obtained by x-rays. A freshly prepared platelet suspension was exposed to a flash x-ray source of high intensity which produced a bas-relief impression on a photon-sensitive resist. The latter was examined by scanning electron microscopy. The live platelet was in a state of activation. Intracellular organelles are seen here contracted in one core of photon-dense material from which pseudopods originate. See page 63. [Photo digitizing by A. Appel and A. Stein, IBM, Yorktown Heights, New York 10598; image produced with Maxwell Laboratories Low Energy X-ray Illumination Source, San Diego, California 92123]