1223 This Week in Science

Editorial

1225 Judicial Impact Statements

Letters


News & Comment

1229 Activists Beset UC, Stanford Labs ■ A Lab in the Line of Fire
1233 Academy Panel Faults NASA's Safety Analysis
1234 A Bloody Battle Over an Anemia Treatment
1235 Article Embroils JAMA in Ethical Controversy
1236 NTIS: Up for Grabs Again?
1237 U.S. Science Students Near Foot of Class

Research News

1238 Whom to Blame for the Great Storm?
1240 Modern Human Origins Under Close Scrutiny
1241 Zeroing in on the Zeta Function
1243 Thallium Superconductor Reaches 125 K
A Monkey Virus in Human Clothing

Articles

1263 Genetic and Fossil Evidence for the Origin of Modern Humans: C. B. STRINGER AND P. ANDREWS
1269 Structure of the Receptor for Insulin-Like Growth Factor II: The Puzzle Amplified: R. A. ROTH

Research Articles

1272 Three-Dimensional Structure of Cholera Toxin Penetrating a Lipid Membrane: H. O. RIBI, D. S. LUDWIG, K. L. MERCER, G. K. SCHOOLNIK, R. D. KORNBERG

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. Second-class postage (publication No. 484460) paid at Washington, DC, and at an additional entry. Now combined with The Scientific Monthly & Copyright © 1988 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): $65. Domestic institutional subscription (51 issues): $96. Foreign postage extra: Canada $32, other (surface mail) $27, air-sur- face via Amsterdam $65. First class, air-mail, school-year, and student rates on request. Single copies $3.00 ($3.50 by mail); back issues $5.00 ($6.00 by mail); biotechnology issue, $5.50 ($6 by mail); classroom rates on request; Guide to Bio- technology Products and Instruments $16 ($17 by mail). Change of address: allow 6 weeks, giving old and new ad- dresses and seven-digit account number. Authorization to photocopy material for internal or personal use under circum- stances not falling within the fair use provisions of the Copyright Act is granted by AAAS to libraries and other users regis- tered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of $1 per copy plus $.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.
cover  Sockeye salmon, among the most economically important fish species in
the world, migrating from their ocean feeding grounds to spawn and die in
freshwater (Adams River, British Columbia). Relative aquatic productivity of
oceans and freshwaters has probably played an important role in the evolution
of such spectacular movements by fishes. See page 1291. [Photograph by Mari Trim,
courtesy of the Department of Fisheries Canada and Douglas & McIntyre Ltd.]

Reports

1284 The Motion of Untwisted Untorted Scroll Waves in Belousov-Zhabotinsky
Reagent: J. P. Keener and J. J. Tyson
1286 A Cesium-Selective Ion Sieve Made by Topotactic Leaching of Phlogopite Mica: S.
Komarneni and R. Roy
1288 Generation of cDNA Probes Directed by Amino Acid Sequence: Cloning of
1291 Aquatic Productivity and the Evolution of Diadromous Fish Migration: M. R. Gross, R. M. Coleman, R. M. McDowell
1293 Nicotinic Antagonists Enhance Process Outgrowth by Rat Retinal Ganglion Cells
in Culture: S. A. Lipton, M. P. Froesch, M. D. Phillips, D. L. Tauck, E. Aizenman
1296 Dynamic Changes in Inhibin Messenger RNAs in Rat Ovarian Follicles During
the Reproductive Cycle: T. K. Woodruff, J. D'Agostino, N. B. Schwartz, K. E. Mayo
1299 Alternative Mechanisms for Activation of Human Immunodeficiency Virus
1302 Regulation of Gene Expression by Interferons: Control of H-2 Promoter
Responses: B. Korber, N. Mermod, L. Hood, I. Stroynowski
1306 Salivary Gland Lysates from the Sand Fly Lutzomyia longipalpis Enhance
Larval Infectivity: R. G. Titus and J. M. C. Ribeiro
1308 Neural Model of Adaptive Hand-Eye Coordination for Single Postures:
M. Kuperstein
1311 Gene Encoding the β Subunit of S100 Protein Is on Chromosome 21:
Implications for Down Syndrome: R. Allore, D. O'Hanlon, R. Price,
K. Neilson, H. F. Willard, D. R. Cox, A. Marks, R. J. Dunn

Technical Comments

1313 ACTH Regulation and IL-1: A. Arimura

Book Reviews

1320 The Competitive Challenge, reviewed by C. Freeman Nuclear Imperatives and
Public Trust, D. Isherwood Higher Brain Functions, S. Peterson Genetics
and Plant Pathogenesis and Populations of Plant Pathogens, J. A. Kolmer Books Received

Products & Materials

1325 Chromatography Workstation Image Storage System Cell Culture Labware
Electrophoresis Power Supply Automatic DNA Sequencer Sucrose Gradient Generator Cloning Vector Literature

Board of Directors
Sheila E. Widnall Retiring President, Chairman
Walter E. Massey President
Richard C. Atkinson President-elect

Editorial Board
Elizabeth E. Bailey David Baltimore William F. Brinkman
Philip E. Converse Joseph L. Goldstein F. Clark Howell
James D. Idol, Jr. Leon Knopff Oliver H. Nelson
Helen M. Ranney David M. Raup Howard A. Schneiderman
Larry L. Smarr Robert M. Solow James D. Watson

Board of Reviewing Editors
John Abelson Oais Al-Awadi Don L. Anderson
Stephen J. Benkovic Floyd E. Bloom James J. Bull
Charles R. Cantor Ralph J. Ciarone
John M. Coffin Bruce F. Eldridge Paul T. Englund
Theodore H. Geballe Roger I. M. Glass
Stephen P. Gold

Robert B. Goldberg Corey S. Goodman Jack Gorski
Gino E. Polk Stephen J. Gould Richard M. Held
Glasa Happner Eric F. Johnson
Konrad B. Krauskopf Charles S. lemon III
Richard Losick Karl L. Magleby Philippa Marrack
Joseph B. Martin

John C. McGiff Mortimer Mishkin Jiri Novotny

Gordon H. Orians

Carl O. Pabo
John S. Pearse
Yoshiyasu Pocker
Jean Paul Ravel
James E. Rothman
Daniel V. Senti
Thomas C. Schelling
Ronald H. Schwartz
Otto Slobodkin
Robert N. Tjian
Virginia Trimble
Garret J. Vanmijl
Harold Weintraub
Irving L. Weissman
George M. Whitesides
Owen N. Witte
William B. Wood

II MARCH 1988

TABLE OF CONTENTS 1221