NEWS & COMMENT

Genome Project Plans Described 152
Clinton Asks for a Greener DOE 153
Surprise! A Fungus Factory for Taxol? 154
At Tokyo University, a Parting Shot 155
The Cost of Scientific Pork Keeps Going Up 156
Early AZT Takes a Pounding in French-British 'Concorde' Trial 157

RESEARCH NEWS

Ulcers as an Infectious Disease 159
Why Some Fishes Are Hotheads 160
A Balancing Act in Predatory Fishes 159
Biologists Visit New Orleans (Under an Assumed Name) 162
A New Supernova in the Northern Sky 163
Tribe of Brown Dwarfs Discovered? 163
Condensed Matter Physicists Shrink Their Horizons 164

PERSPECTIVES

Forging an Asteroid-Meteorite Link 167
M. J. Gaffey
Measuring Single Protein Motors at Work 169
R. D. Vale

ARTICLES

Near-Field Investigations of the Landers 171
Earthquake Sequence, April to July 1992

RESEARCH ARTICLES

Regulation of Gene Expression in Hippocampal Neurons by Distinct Calcium Signaling Pathways 181
H. Badin, D. D. Ginry, M. E. Greenberg

Departments

This Week in Science 141
Science and Society 143
Letters 145
Audit at Woods Hole: C. E. Dorman • Drugs from Third World Plants: Creative Approaches: I. S. Johnson • No Lack of NO Activity: F. T. Bonner and M. N. Hughes; T. Michel • Tyrolean Paraphernalia: M. L. Grant; R. Temple; N. Denman; K. A. Klar • Sociological Discourse: J. A. Witzkowski

Deparments

ScienceScope 151
Random Samples 158
Book Reviews 244
Dynamic Biological Networks, reviewed by C. L. Sahley • Terrestrial Ecosystems Through Time, J. W. Valentine • Wealth and Hierarchy in the Intermediate Area, W. Creamer • Vignettes • Books Received

Products & Materials 248

AAAS Board of Directors

F. Sherwood Rowland Retiring President, Chairman
Alan Schmeltz Treasurer
Richard S. Nicholson Executive Officer

Board of Reviewing Editors

Mortimer Mishkin Roger A. Nicoll
Thomas A. Steitz William H. Orme-Johnson III
Nicole Núñez Stuart L. Pimm
Terence J. Sejnowski Yeshayau Pocker
Robert T. N. Tian Dennis A. Powers
Robert F. Thompson Ralph S. Guarino
Robert A. Frosch V. Ramaswamy
Florence P. Haseltine Douglas C. Rees
William A. Lester, Jr. Eriki Rustuahli

161 & 216 Balanced polymorphisms

154 & 214 Taxol from a fungus

138

SCIENCE • VOL. 260 • 9 APRIL 1993

Downloaded from http://science.sciencemag.org/ on May 3, 2017
Fishes of the suborder Scombroidei, like this school of Euthynnus affinis in the Red Sea, are capable of endothermy. A molecular phylogeny of this suborder (which includes mackerels, bonitos, tunas, and billfishes) indicates that endothermy has evolved three times within Scombroidei. Comparison of endothermic scombrids with their closest living ectothermic relatives provides a further understanding of how endothermy evolved. See page 210 and the News story on page 160. [Photo: Jeffrey L. Rotman/Peter Arnold, Inc.]

**REPORTS**

Silica Precipitation in Fractures and the Evolution of Permeability in Hydrothermal Upflow Zones
R. P. Lowe, P. Van Cappellen, L. N. Germanovich

Production of Metallo-Carbohedrenes in the Solid State

Metastability of Superconducting Compounds in the Y-Ba-Cu-O System
E. L. Brosha, P. K. Davies, F. H. Garzon, I. D. Rastrick

Electrostatic Screening of Charge and Dipole Interactions with the Helix Backbone
D. J. Lockhart and P. S. Kim

Pressure-Induced Amorphization of R-AlLiCu: A Structural Relation Among Amorphous Metals, Quasi-Crystals, and Curved Space
R. R. Winters and W. S. Hammack

Velocity Structure of a Gas Hydrate Reflector
S. C. Singh, T. A. Minshull, G. D. Spence

Impairment of V(D)J Recombination in Double-Strand Break Repair Mutants

Evolution of Endothermy in Fish: Mapping Physiological Traits on a Molecular Phylogeny
B. A. Block, J. R. Finnerty, A. F. R. Stewart, J. Kidd

Taxol and Taxane Production by Taxomyces andreanae, an Endophytic Fungus of Pacific Yew
A. Stierle, G. Strobel, D. Stierle

Frequency-Dependent Natural Selection in the Handedness of Scale-Eating Cichlid Fish
M. Hori

Distinct Functions of SR Proteins in Alternative Pre-mRNA Splicing
A. M. Zahler, K. M. Neugebauer, W. S. Lane, M. B. Roth

Spatially Resolved Dynamics of cAMP and Protein Kinase A Subunits in Aplysia Sensory Neurons

Increased Frequency of Calcium Waves in Xenopus laevis Oocytes That Express a Calcium-ATPase
F. Camacho and J. D. Lechleiter

Acceleration of Intracellular Calcium Waves in Xenopus Oocytes by Calcium Influx
S. Girard and D. Clapham

Force of Single Kinesin Molecules Measured with Optical Tweezers
S. C. Kuo and M. P. Sheetz

Decreased Expression of Myotitin-Protein Kinase Messenger RNA and Protein in Adult Form of Myotonic Dystrophy

Regulation of CREB Phosphorylation in the Suprachiasmatic Nucleus by Light and a Circadian Clock
D. D. Gin, J. M. Kornhauser, M. A. Thompson, H. Bading, K. E. Mayo, J. S. Takahashi, M. E. Greenberg

**TECHNICAL COMMENTS**

Effect of Scale on Food Web Structure
N. D. Martinez, K. Havens

* Indicates accompanying feature