LETTERS
Least Publishable Unit: R. W. Buddemeier; J. Roth; Startling
Punctuation: N. P. Christy; G. B. Kolata; Guinea Worm Disease:
D. R. Hopkins and W. H. Foege

EDITORIAL
Affordable Science

ARTICLES
An Ice-Free Cretaceous? Results from Climate Model Simulations:
E. J. Barron, S. L. Thompson, S. H. Schneider
Brain, Lung, and Heart Functions During Diving and Recovery:
P. W. Hochachka
National Science Foundation Budgets: Fiscal Years 1981, 1982, and Beyond:
L. M. Branscomb

NEWS AND COMMENT
Ambitious Energy Project Loses Luster
Military Plans for Shuttle Stir Concern
Afghanistan: The Politics of a Tragicomedy
Attempts to Safeguard Technology Draw Fire
Briefing: Meltdown Too Hot for Maryland Science Center; The Perils of
Isabelle: Under the Budget Ax; Edwards Hears Criticism from Synfuels
Industry; College Students Fail Global Awareness Test
The Containment of Research

RESEARCH NEWS
Micromainframe Is Newest Computer on a Chip
Meeting Highlights: Magma Chambers in the Laboratory; More Deep-Sea
Hot Springs in the Pacific; Rifts Propagating in the Pacific
Tale of the Orphaned Genes

AAAS NEWS
Questions of Science Literacy Addressed by Rutherford/AAAS: 1982 Exhibit;
Energy and Health to Be Discussed in Berkeley; Short Courses at
Pacific Division, Annual Meeting

BOOK REVIEWS
Evolution and Ecology of Zooplankton Communities, reviewed by
E. L. Mills; Ball Lightning and Bead Lightning, R. E. Orville;
The Nature of Thought, K. Oatley; A History of Computing in the
Twentieth Century, N. Stern; Books Received
Control of Equatorial Ocean Currents by Turbulent Dissipation:  
W. R. Crawford and T. R. Osborn ........................................... 539

Regression of Aflatoxin B1–Induced Hepatocellular Carcinomas by Reduced  
Glutathione: A. M. Novi .......................................................... 541

Changes in DNA During Meiosis in a Repair-Deficient Mutant (rad 52) of Yeast:  
M. A. Resnick et al. ................................................................. 543

Mutation Caused by Human Phagocytes: S. A. Weitzman and T. P. Stossel ...... 546

Transformation of Paralytic Shellfish Toxins as Demonstrated in Scallop  
Homogenates: Y. Shimizu and M. Yoshioka .................................. 547

Tritiated Thymidine Incorporation Does Not Measure DNA Synthesis in  
Ribavirin-Treated Human Cells: J. C. Drach et al. ................................ 549

Ctenidial Autotomy in Corbicula fluminea in Response to Massive Granulomas:  
J. C. Britton et al. ................................................................. 551

Purified Reduced Nicotinamide Adenine Dinucleotide: Responses to Lactate  
Dehydrogenase Isozymes from Three Cell Sources: A. E. Kaplan et al. ....... 553

Excitation of Limulus Photoreceptors by Vanadate and by a Hydrolysis-  
Resistant Analog of Guanosine Triphosphate: A. Fein and D. W. Corson .... 555

Isoguanosine: Isolation from an Animal: F. A. Fuhrman et al. ...................... 557

Tyrosine Increases Blood Pressure in Hypotensive Rats: L. A. Conlay,  
T. J. Mahler, R. J. Wurtman ...................................................... 559

Cadmium-113 Nuclear Magnetic Resonance Studies of Bovine Insulin: Two-Zinc  
Insulin Hexamer Specifically Binds Calcium: J. L. Sudmeier et al. .......... 560

Evidence for Endomycorrhizae in Pennsylvanian Age Plant Fossils:  
C. A. Wagner and T. N. Taylor .................................................... 562

Alternative Male Strategies: Genetic Differences in Crickets: W. H. Cade ........ 563

Energetics of Honeybee Swarm Thermoregulation: B. Heinrich .................. 565

Different Proteins Associated with 10-Nanometer Filaments in Cultured Chick  
Neurons and Nonneuronal Cells: G. S. Bennett et al. .......................... 567

Drug Discrimination Learning in Lead-Exposed Rats: H. Zenick and  
M. Goldsmith ............................................................................ 569

Euusociality in a Mammal: Cooperative Breeding in Naked Mole-Rat Colonies:  
J. U. M. Jarvis ........................................................................... 571

Male Vole Urine Changes Luteinizing Hormone–Releasing Hormone and  
Norepinephrine in Female Offactory Bulb: D. E. Dluzen et al. ............... 573

Age Determination for the Shanidar 3 Neanderthal; D. D. Thompson and  
E. Trinkaus .............................................................................. 575

Technical Comments: Terminal Cretaceous Extinctions and the Arctic Spillover  
Model: D. L. Clark and J. A. Kittell; S. Garten; Food Colors and  

COVER

Antarctic Weddell seal (Leptonychotes weddelli) initiating a dive under the ice  
shelf near Ross Island, Antarctica. The length of diving depends on regulated  
blends of anaerobic and aerobic metabolism in different tissues and organs.  
See page 509. [R. Davis, Scripps Institution of Oceanography, La Jolla, Cali-  
ifornia]
Editor's Summary