LETTERS
Tracing Aerosol Pollution: G. D. Thurston and N. M. Laird; K. A. Rahn and D. H. Lowenthal; Smoking and Longevity: G. H. Miller and D. R. Gerstein

EDITORIAL
Health, Wealth, and Unhappiness

ARTICLES
Ore Metals Through Geologic History: C. Meyer
Genetic Basis for Species Vulnerability in the Cheetah: S. J. O’Brien et al.
Rapid and Sensitive Protein Similarity Searches: D. J. Lipman and W. R. Pearson

NEWS AND COMMENT
U.S. Experts Condemn Soviet Radar
NAE Elects New Members
Air Force, NASA Settle Launch Dispute
Briefings: Shultz Chides Scientists But Also Calls for Advice; USDA’s Basic Research Needs Beefing Up; U.S. Sanctions Required to Enforce Whaling Ban; Superfund Needs Superfunding (and More)
EPA Accelerates Ban on Leaded Gas

RESEARCH NEWS
A Virus by Any Other Name
Periodic Extinctions and Impacts Challenged
Fifteen Years of African Drought

ANNUAL MEETING
Tours

BOOK REVIEWS
Galileo and His Sources, reviewed by W. R. Shea; Theory of Slow Atomic
Reports

Margin to Craton Expansion of Late Ordovician Benthic Marine Invertebrates: P. W. Bretsky and S. M. Klofak .................................................... 1469
Flow Effects of Prostacyclin Production by Cultured Human Endothelial Cells: J. A. Frangos et al. .......................................................... 1477
Xylem-Tapping Mistletoes: Water or Nutrient Parasites?: J. R. Ehleringer et al. ................................................................................................. 1479
Bovine Leukemia Virus–Related Antigens in Lymphocyte Cultures Infected with AIDS-Associated Viruses: L. Thiry et al. ......................... 1482
Trypanothione: A Novel Bis(glutathionyl)spermidine Cofactor for GlutathioneReductase in Trypanosomatids: A. H. Fairlamb et al. ......................... 1485
Disorganization of Cultured Vascular Endothelial Cell Monolayers by FibrinogenFragment D: C. V. Dang et al. ................................................................ 1487
Protection from Genital Herpes Simplex Virus Type 2 Infection by Vaccination with Cloned Type 1 Glycoprotein D: P. W. Berman et al. .......... 1490
How Bees Remember Flower Shapes: J. L. Gould ................................... 1492
Regional Myocardial Substrate Uptake in Hypertensive Rats: A QuantitativeAutoradiographic Measurement: Y. Yonekura et al. ......................... 1494
Alterations in L-Glutamate Binding in Alzheimer’s and Huntington’s Diseases: J. T. Greenamyre et al. ........................................................ 1496
Control of Cytochrome P450 Gene Expression by Dioxin: P. B. C. Jones et al. ................................................................................................. 1499

Products and Materials

Vacuum Ovens; Scanning Electron Microscope; Spectrophotometer; Calculator for Chemical Solutions; Elemental Analyzer; Image Processor; Literature .......................................................... 1506

Cover

South African cheetah cub (Acinonyx jubatus). The cheetah is the world’s fastest mammal and the most morphologically specialized felid. The modern species appears to be striking in its biochemical genetic uniformity compared to other felids or mammals in general, possibly as a result of a severe population bottleneck or series of bottlenecks in its natural history. The consequences of this genetic monomorphism are readily apparent in captive cheetah, and the species provides a graphic biological example for the adaptive value of accumulated genetic variation in outbred mammalian species. See page 1428. [Jay Golden, Wild-life Safari, Winston, Oregon]
Science 227 (4693), 1406-1506.