NEWS & COMMENT
Population: The View From Cairo 1164
Science and Math Scores Rebound 1167
Dutch Universities: Academics Give New Government a Jolt 1168
Checkmate for Chess Historians 1168
Accounting Tricks Boost NSF Budget 1169
Pollination Worries Rise as Honey Bees Decline 1170

RESEARCH NEWS
Decoding Chimp Genes and Lives 1172
Do Chaos-Control Techniques Offer Hope for Epilepsy? 1174
Yeast Enzyme Finds Fame in Link to DNA Replication 1175
New Enzyme Structure Reveals Cell’s Rotary Engine 1176
Ecologists Gather for Mix of Policy, Science in Nashville 1178

POLICY FORUMS
Predicting Earthquake Effects—Learning from Northridge and Loma Prieta 1182
T. L. Holzer
Fluorescent Barriers to Infiltration 1184
B. Wattenburg

PERSPECTIVE
Gamma Ray Bursts: Near or Far? 1186
J. M. Horack

ARTICLES
Real-Time Parallel Computation and Visualization of Ultrasonic Pulses in Solids 1188
R. S. Schechter, H. H. Chaskeles, R. B. Mignogna, P. P. Delsanto

REPORTS
The Phase Boundary Between α- and β-Mg,2SiO4 Determined by in Situ X-ray Observation 1202

DEPARTMENTS
THIS WEEK IN SCIENCE 1153
EDITORIAL
Chlorine and Organochlorine Compounds 1155

LETTERS
Rhino Conservation: B. Loutit and S. Montgomery 1157
Clinical Trials: Subgroup Analyses: K. E. Stanley, M. A. Fischl, A. C. Collier, R. Nowak 1157
A Coincidental Move: F. H. Shu 1157
Violence and Biology: A. Raine, P. Brennan, S. Mednick 1157
“Neurogenetic Determinism”: S. Rose 1157

BOOK REVIEWS
The Earth, the Heavens, and the Carnegie Institution of Washington, reviewed by E. L. Mills 1253
Primordial Immunity, M. Flajnik 1254
Queen Number and Sociality in Insects, R. H. Crozier 1254
Vignettes 1254

PRODUCTS & MATERIALS 1259
INSIDE AAAS 1260

Board of Reviewing Editors
Frederick W. Alt
Don L. Anderson
Michael Ashburner
Stephen J. Benkovic
David E. Bloom
Floyd E. Bloom
Paul Burst
Henry R. Bourne
Michael S. Brown
James I. Bull
Kathryn Calame
C. Thomas Caskey
Dennis W. Choi
John M. Coffin
Paul J. Crutzen
James E. Dahlberg
Robert Desarcy
Bruce F. Eldridge
Paul T. Englund
Richard G. Farber
Douglas T. Fearon
Harry A. Fozard
Klaus Friedrich
Theodore H. Gabale
John C. Gerhart
Igor I. Glass
Stephen P. Golf
Peter N. Goodfellow
Corey S. Goodman
Irma Horowitz
Eric F. Johnson
Stephen M. Kosslyn
Michael LaBarbera
Nicole Le Douarin
Charles S. Levinson III
Alexander Levitzki
Harvey F. Lodish
Richard Losick
Diane Mathis
Anthony R. Means
Shigetada Nakazawa
Roger A. Nicoll
Stuart L. Pimm
Yoshioyama Pocker
Dennis A. Powers
Ralph S. Quatrano
V. Ramachandran
Douglas C. Rees
T. M. Rice
David C. Rubie
Erdi Rozalski
Gotthard Schatz
Jozef Schell
Ronald H. Schwartz
Terence J. Sejnowski
Ellen Solomon
Thomas A. Steitz
Michael P. Stinsky
Robert T. N. Tjian
Emri R. Unanue
Geerat J. Vermeij
Bert Vogelstein
Harald Weintrab
Arthur Weiss
Zena Werb
George M. Whitesides
Owen N. Witte
William A. Wulf

1150
SCIENCE • VOL. 265 • 26 AUGUST 1994

Downloaded from http://science.sciencemag.org/ on April 20, 2017
A female chimpanzee from the East African Kasakela social community in Gombe National Park, Tanzania. Results of noninnvasive genotyping from the hair of chimpanzees from Gombe and other communities across Africa support the influence of kin selection and cooperation of related males on the evolution of social structure of chimpanzee communities. The results also suggest that a West African subspecies merits consideration as a separate species. See page 1193 and the News story on page 1172. [Photo: Phillip Morin]

Newtonian Dislocation Creep in Quartzites: Implications for the Rheology of the Lower Crust

The Nature of the Glass Transition in a Silica-Rich Oxide Melt I. Farnan and J. F. Stebbins

Molecular Origins of Friction: The Force on Adsorbed Layers M. Cieplak, E. D. Smith, M. O. Robbins

Aligned Carbon Nanotube Arrays Formed by Cutting a Polymer Resin–Nanotube Composite P. M. Ajayan, O. Stephan, C. Colliex, D. Trauth

A 160-Femtosecond Optical Image Processor Based on a Conjugated Polymer C. Halvorson, A. Hays, B. Kraabel, R. Wu, F. Wudl, A. J. Heeger

Mechanism of the Selective Catalytic Reduction of Nitric Oxide by Ammonia Elucidated by in Situ On-Line Fourier Transform Infrared Spectroscopy N.-Y. Topsøe

The Spatial Structure in Liquid Water P. G. Kusalik and I. M. Svirshchev

Dependence of Enhancer-Mediated Transcription of the Immunoglobulin µ Gene on Nuclear Matrix Attachment Regions W. C. Forrester, C. van Genderen, T. Jenuwein, R. Grosschedl

Treatment of Murine Lupus with CTLA4 Ig B. K. Finck, P. S. Linsley, D. Wofsy

Direct Inhibition of the Yeast Cyclin-Dependent Kinase Cdc28-Cln by Far1 M. Peter and I. Herskowitz


Regulatory T Cell Clones Induced by Oral Tolerance: Suppression of Autoimmune Encephalomyelitis Y. Chen, V. K. Kuchroo, J.-i. Inobe, D. A. Hafler, H. L. Weiner

Catalysis of ATP-Dependent Homologous DNA Pairing and Strand Exchange by Yeast RAD51 Protein S. Sung

Interaction of Dbf4, the Cdc7 Protein Kinase Regulatory Subunit, with Yeast Replication Origins in Vivo S. J. Dowell, P. Romanowski, J. P. X. Difflrey

Convergent Pathways for Steroid Hormone- and Neurotransmitter-Induced Rat Sexual Behavior S. K. Mani, J. M. C. Allen, J. H. Clark, J. D. Blaustein, B. W. O'Malley

TECHNICAL COMMENTS

Accounting for Endothermy in Fishes G. D. Johnson and C. C. Baldwin; J. R. Finnerty and B. A. Block

Earthquake Aftershocks: Update P. A. Reasenberg and L. M. Jones

Cover