COVER
A bearded, horned terra cotta mask, about 5 centimeters in height, found at Mohenjo Daro, Pakistan. The artifact, which may have been attached to a puppet, offers a rare glimpse into the 5000-year-old Indus civilization. See page 1276.
Image: J. M. Kenoyer/Courtesy of the Department of Archaeology and Museums, Government of Pakistan

NEWS OF THE WEEK
Russian Academy President Narrowly Wins Reelection 1270
Breaking With Tradition, France Picks Future Elite Schools 1270
Seaweed Invader Elicits Angst in India 1271
Departing U.S. Genome Institute Director Takes Stock of Personalized Medicine 1272
Runoff Threatens Early Human Site 1273

SCIENCESCOPE
Read All About It—The First Female Genome! Or Is It? 1274
Encourage Risk, Help Young Researchers, Panel Advises 1274
The Andes Popped Up by Losing Their Deep-Seated Rocky Load >> Review p. 1304

NEWS FOCUS
Unmasking the Indus
Boring No More, a Trade-Savvy Indus Emerges 1276
Indus Collapse: The End or the Beginning of an Asian Culture? 1281
Trying to Make Way for the Old Pakistan Archaeology Faces Issues Old and New >> Science Podcast

LETTERS
Working Toward Meritocracy in Italy I. R. Marino 1289
The Emerging World of Wikis J. C. Hu et al. 1289
Science 2.0: Not So New? J. B. Yoder Response B. Shneiderman
CORRECTIONS AND CLARIFICATIONS 1291

BOOKS ET AL.
The Cult of Statistical Significance How the Standard Error Costs Us Jobs, Justice, and Lives S. T. Ziliak and D. N. McCloskey; reviewed by T. M. Porter 1292
Evolutionary Psychology as Maladapted Psychology R. C. Richardson, reviewed by J. J. Bolhuis 1293

POLICY FORUM
Under-Resourced, Under Threat A. J. Richardson and E. S. Poloczanska 1294

PERSPECTIVES
Putting the Heat on Tropical Animals J. J. Tewksbury, R. B. Huey, C. A. Deutsch 1296
The Scale of Prediction N. S. Baliga >> Research Article p. 1313
Improving Correlations Despite Particle Loss J. V. Porto >> Report p. 1329
Refined View of the Ends A. Bianchi and D. Shore >> Report p. 1341
Going with (or Against) the Flow T. Peacock and E. Bradley 1302

1249
PSYCHOLOGY
BREVIA: Serotonin Modulates Behavioral Reactions to Unfairness
M. J. Crockett, L. Clark, G. Tabibnia, M. D. Lieberman, T. W. Robbins
Individuals with low levels of brain serotonin are less likely to accept an unfair offer of money from other players in a laboratory game.

10.1126/science.1155577

ECOLOGY
Animal Versus Wind Dispersal and the Robustness of Tree Species to Deforestation
D. Montoya, M. A. Zavala, M. A. Rodríguez, D. W. Purves
In Spanish forests, tree species with seeds that are dispersed by animals are more resilient in a fragmented forest than those with wind-dispersed seeds.

10.1126/science.1158404

CHEMISTRY
The Role of Interstitial Sites in the Ti3d Defect State in the Band Gap of Titania
S. Wendt et al.
Scanning tunneling microscope data and calculations show that near-surface titanium sites, not bridging oxygen vacancies, determine the useful electronic properties of TiO2.

10.1126/science.1159846

EVOLUTION
Natural Selection Shapes Genome-Wide Patterns of Copy-Number Polymorphism in Drosophila melanogaster
J. J. Emerson, M. Cardoso-Moreira, J. O. Borevitz, M. Long
A high-resolution analysis of gene copy number in Drosophila species shows that most variations are deleterious but a few for resistance to toxins are being positively selected.

10.1126/science.1158078

TECHNICAL COMMENT ABSTRACTS
GEOPHYSICS
Comment on “Intermittent Plate Tectonics?”
J. Korenaga
Response to Comment on “Intermittent Plate Tectonics?”
P. G. Silver and M. D. Behn

PHYSICS
Fine Structure Constant Defines Visual Transparency of Graphene
R. R. Nair et al.
The transparency of sheets of graphene is quantized in a way that allows a simple determination of the fine structure constant, which relates light and relativistic electrons.

RESEARCH ARTICLES
ASTRONOMY
An Eccentric Binary Millisecond Pulsar in the Galactic Plane
D. J. Champion et al.
A rapidly rotating pulsar has a highly eccentric orbit about its companion star, not the usual circular orbit, challenging ideas on how such binary systems form.

MICROBIOLOGY
Predictive Behavior Within Microbial Genetic Networks
I. Tagkopoulos et al.
Predictable sequences of environmental signals can be exploited by bacteria so that they learn to anticipate future metabolic needs and thereby gain a competitive edge.

REPORTS
ASTRONOMY
A Transient Radio Jet in an Erupting Dwarf Nova
E. Körding et al.
Detection of a radio jet in a dwarf supernova shows that production of synchrotron radiation during accretion of a disk is a ubiquitous source of astrophysical jets.
Yeast chromosome ends are protected by a protein complex similar to one-dimensional tubes extends the lifetime of the molecules by more than an order of magnitude. >><> Perspective p. 1300

MOLECULAR BIOLOGY
Intersection of the RNA Interference and X-Inactivation Pathways
Y. Ogawa, B. K. Sun, J. T. Lee
Two noncoding RNAs required for X-chromosome inactivation in female mice form a duplex that is cleaved by the RNA interference machine, indicating a link between X inactivation and RNA interference.

MOLECULAR BIOLOGY
Fission Yeast Pot1-Tpp1 Protects Telomeres and Regulates Telomere Length
T. Miyoshi, J. Kanoh, M. Saito, F. Ishikawa
Yeast chromosome ends are protected by a protein complex similar to that in mammals, which prevents end-to-end chromosome fusion and controls telomere length.

MOLECULAR BIOLOGY
The Transcriptional Landscape of the Yeast Genome Defined by RNA Sequencing
U. Nagalakshmi et al.
A more complete catalog of transcribed DNA of yeast is assembled by shotgun sequencing of messenger RNA and reveals numerous previously unknown transferred regions.

NEUROSCIENCE
High Impulsivity Predicts the Switch to Compulsive Cocaine-Taking
D. Belin et al.
Rats that are more impulsive, but not those that seek novelty, tend to compulsively consume cocaine and become addicted.

CELL BIOLOGY
Subdiffraction Multicolor Imaging of the Nuclear Periphery with 3D Structured Illumination Microscopy
L. Schermelleh et al.
Fluorescence tags illuminated through a diffraction grating reveal the structure of nuclear pores, surrounding channels, and chromatin at a resolution of about 100 nanometers.

PHYSICS
Strong Dissipation Inhibits Losses and Induces Correlations in Cold Molecular Gases
N. Syassen et al.
Inducing inelastic collisions in cold gas condensates confined in one-dimensional tubes extends the lifetime of the molecules by more than an order of magnitude.

PHYSICS
Multiparticle Entanglement Among Single Spins in Diamond
P. Neumann et al.
Nitrogen vacancy centers in diamond are used to generate and detect 2-qubit and 3-qubit entangled states at room temperature.

DEVELOPMENTAL BIOLOGY
Precursors of Ciona intestinalis
L. Christiaen et al.
In embryonic cells destined to form the heart in a simple chordate, a genetic network activates modules of effector genes for proteins that control cellular migration.

NEUROSCIENCE
Patches with Links: A Unified System for Processing Faces in the Macaque Temporal Lobe
S. Moeller, W. A. Freiwald, D. Y. Tsao
The six regions of the macaque cortex that respond to faces are strongly and specifically interconnected, indicating hierarchical processing of face stimuli.
PERSPECTIVE: ROCO Kinase Activity Is Controlled by Internal GTPase Function
B. Weiss
The guanosine triphosphatase (GTPase) domain of leucine-rich repeat kinase 2 (LRRK2) mediates LRRK2 homodimerization and controls its protein kinase activity.

PERSPECTIVE: Dual Functions of the KNOTTED1 Homeodomain—Sequence-Specific DNA Binding and Regulation of Cell-to-Cell Transport
N. Bolduc, S. Hake, D. Jackson
A single domain confers different subcellular localizations of the homeodomain protein KN1.

TEACHING RESOURCE: Physiological and Pathological Actions of Calpains in Glutamatergic Neurons
J. Liu, M. C. Liu, K. K. W. Wang
A pair of animations illustrates how neuronal calpains contribute to synaptic plasticity or neuronal toxicity.

SCIENCE CAREERS
www.sciencemag.org/career_development
FREE CAREER RESOURCES FOR SCIENTISTS
Student-Veterans Come Marching Home: Their Return to Studies
A. Kotok
A group of Iraq and Afghanistan veterans tells about their new lives as science and engineering students.

Student-Veterans Come Marching Home: A New G.I. Bill for Scientists
A. Kotok
Can the proposed G.I. Bill do for Iraq and Afghanistan veterans what the original G.I. Bill did for World War II veterans?

Taken for Granted: Over Here
B. L. Benderly
Science and technology fields offer professional opportunities for veterans who choose wisely.

June 2008 Funding News
GrantsNet Staff
Learn about the latest in research funding, scholarships, fellowships, and internships.

SCIENCE PODCAST
www.sciencemag.org/about/podcast.dtl
FREE WEEKLY SHOW
Download the 6 June Science Podcast to hear about climate-driven impacts on marine life, impulsivity and cocaine addiction, new insights into the Indus civilization, and more.