EDITORIAL
503  The Global Knowledge Society
Nina V. Fedoroff

NEWS OF THE WEEK
508  A roundup of the week’s top stories

NEWS & ANALYSIS
512  The Limits of Avian Flu Studies in Ferrets
514  Donation Spurs a Cell Observatory—And Bigger Plans
515  Celebrated Exoplanet Vanishes in a Cloud of Dust—Or Maybe Not

NEWS FOCUS
516  China’s Sequencing Powerhouse Comes of Age
520  Rebuilding Wetlands by Managing the Muddy Mississippi
522  Technology Is Turning U.S. Oil Around But Not the World’s

SPECIAL FEATURE
525  2011 International Science & Engineering Visualization Challenge
>> For related online content, go to www.sciencemag.org/site/special/vis2011/
Science Podcast

LETTERS
537  Investing in Libya’s Education
S. K. Sgaier
Invasive Species Unchecked by Climate
P. E. Hulme
Response
M. T. Burrows et al.

Proceed with Planning Despite Multiple Models
R. Dickinson

CORRECTIONS AND CLARIFICATIONS
538

TECHNICAL COMMENT ABSTRACTS
538

BOOKS ET AL.
540  American Anthrax
J. Guillemin, reviewed by D. A. Relman
541  Strings Attached
R. W. Grant, reviewed by T. Cowen

POLICY FORUM
542  Coercive Citation in Academic Publishing
A. W. Wilhite and E. A. Fong

PERSPECTIVES
544  Ready, Steady, Compete
M. C. Villeval
>> Report p. 579
545  Surviving in a Toxic World
A. J. Wolstenholme
>> Report p. 574
546  To Stop or Not to Stop?
N. D. Volkow and R. D. Baler
>> Report p. 601
548  Marching in Near Lock-Step
D. T. Rodbell
>> Report p. 570
549  Seeing the Superfluid Transition of a Gas
W. Zwerger
>> Report p. 564

CONTENTS continued >>

COVER
Computer illustration of streams of matter delineating the network of cosmic voids, each tens of millions of light years across. Matter accumulates where the voids meet, forming a cosmic web of walls, filaments, and clusters of galaxies. This illustration was awarded first place in the informational graphics category in the 2011 Science/NSF International Science & Engineering Visualization Challenge. The winning entries are featured in a special section starting on page 525 and at www.sciencemag.org/site/special/vis2011/.

Image: Miguel A. Aragon Calvo, Julieta Aguilera, Mark Subbarao

DEPARTMENTS
501  This Week in Science
504  Editors’ Choice
506  Science Staff
605  New Products
606  Science Careers
CONTENTS

BREVIA
551 Nanoscopy in a Living Mouse Brain
S. Berning et al.
Super high-resolution microscopy resolves neuron dynamics in the cerebral cortex of a living mouse.

RESEARCH ARTICLES
552 High-Resolution View of the Yeast Meiotic Program Revealed by Ribosome Profiling
G. A. Brar et al.
During yeast sporulation, the production of most proteins is tightly regulated by both messenger RNA levels and translational control.

557 The Southern Ocean’s Role in Carbon Exchange During the Last Deglaciation
A. Burke and L. F. Robinson
Radiocarbon measurements of deep-sea corals reveal the presence of old, carbon-rich water in the Southern Ocean.

REPORTS
561 Spin-Down of Radio Millisecond Pulsars at Genesis
T. M. Tauris
Numerical calculations show that processes responsible for spinning up millisecond pulsars may also lead them to slow down.

563 Revealing the Superfluid Lambda Transition in the Universal Thermodynamics of a Unitary Fermi Gas
M. J. H. Ku et al.
Thermodynamic quantities for the superfluid transition of a strongly interacting atomic Fermi gas were measured.

567 Iron Catalysts for Selective Anti-Markovnikov Alkene Hydrosilylation Using Tertiary Silanes
A. M. Tondreau et al.
Iron catalysts offer a potentially cheaper route than platinum for certain commercially useful carbon-silicon compounds.

570 High-Latitude Forcing of the South American Summer Monsoon During the Last Glacial
L. C. Kanner et al.
High-latitude processes in the Northern and Southern Hemispheres both influence the South American Summer Monsoon.

574 Natural Variation in a Chloride Channel Subunit Confers Avermectin Resistance in C. elegans
R. Ghosh et al.
Resistance to avermectin, an anti-nematode drug, is conferred by a deletion in a glutamate-gated chloride channel.

579 Affirmative Action Policies Promote Women and Do Not Harm Efficiency in the Laboratory
L. Balafoutas and M. Sutter
Increasing the representation of competition-averse individuals does not alter overall output.

582 Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India
L. Beaman et al.
The effects of female leaders on girls occur via policy changes in the short run and parental aspirations in the longer run.

587 Untangling Genomes from Metagenomes: Revealing an Uncultured Class of Marine Euryarchaeota
V. Iverson et al.
Reconstruction of whole genomes from a complex microbial community has revealed an evolutionary surprise.

593 Growth of Western Australian Corals in the Anthropocene
T. F. Cooper et al.
Cores taken from massive corals indicate that temperature rather than ocean acidification has governed reef growth.

597 Innate Response Activator B Cells Protect Against Microbial Sepsis
P. J. Rauch et al.
A specialized population of B lymphocytes is important for controlling bacterial infections and preventing sepsis.

601 Abnormal Brain Structure Implicated in Stimulant Drug Addiction
K. D. Ersche et al.
A neurological marker of addiction vulnerability occurs in sibling pairs who do not take drugs.