## CONTENTS

### EDITORIAL
557  Young Brains on Drugs  
Robert L. DuPont and Jeffrey A. Lieberman

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

### NEWS & ANALYSIS
566  Fresh Misconduct Charges Hit Dutch Social Psychology
567  New Sites Bring the Earliest Americans Out of the Shadows
569  ‘Sea Butterflies’ Are a Canary for Ocean Acidification
570  ‘Rejuvenation Factor’ in Blood Turns Back the Clock in Old Mice  
>> Research pp. 630 and 649
571  Designer Microbes Expand Life’s Genetic Alphabet

### NEWS FOCUS
572  Maritime Ambitions  
>> Science Podcast

### LETTERS
577  Breast Cancer and Environmental Research  
J. G. Brody et al.
Copper Limits: Opportunity Costs  
J. E. Tilton
Copper Limits: Recycling Potential  
G. Lagos
Copper Limits: Human Agency  
A. J. Cavallo

### BOOKS ET AL.
579  Beauty, Challenges, Ingenuity, and Horrors

### EDUCATION FORUM
583  Convergence Between Science and Environmental Education  
A. E. J. Wals et al.

### PERSPECTIVES
585  A SWELL Channel Indeed  
J. A. Mindell  
>> Report p. 634
586  Next Steps for Cosmology  
J. Silk and J. Chluba
588  Host Controls of HIV Neutralizing Antibodies  
B. F. Haynes and L. Verkoczy
590  Trigger Factor Flexibility  
M. Gamerdinger and E. Deuerling  
>> Research Article p. 597
591  An Internal Cure for Damaged Polymers  
Z. Zhao and E. M. Arruda  
>> Report p. 620
593  Rice, Psychology, and Innovation  
J. Henrich  
>> Research Article p. 603
594  A Price to Pay for Adult Neurogenesis  
L. A. Mongiat and A. F. Schinder  
>> Research Article p. 598

### REVIEW
596  Sound Strategies for Hearing Restoration  
G. S. G. Géléoc and J. R. Holt  
Review Summary; for full text:  
http://dx.doi.org/10.1126/science.1241062

## DEPARTMENTS

### ON THE WEB THIS WEEK
>> Science Podcast  
On this week’s show: marine archaeology digs up political complexities and a roundup of stories from our daily news site.

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## COVER
Farmers drying grains of rice in the sun in China’s Anhui province. New psychological tests suggest that China’s history of rice farming has given the south more markers of traditional East Asian culture, such as interdependence, holistic thought style, and low divorce rates. In comparison, people in wheat-growing northern China are more independent. See pages 593 and 603.

Photo: Getty Images
RESEARCH ARTICLES

597 Structural Basis for Protein Antiaggregation Activity of the Trigger Factor Chaperone
T. Saio et al.
Nuclear magnetic resonance data show how molecular chaperones recognize and prevent aggregation and misfolding of unfolded proteins.
Research Article Summary: for full text: http://dx.doi.org/10.1126/science.1250494
>> Perspective p. 590

598 Hippocampal Neurogenesis Regulates Forgetting During Adulthood and Infancy
K. G. Akers et al.
Addition of new neurons leads to remodeling of hippocampal circuitry and memory degradation.
>> Perspective p. 594

603 Large-Scale Psychological Differences Within China Explained by Rice Versus Wheat Agriculture
T. Talhelm et al.
A history of growing rice contributed to an interdependent mode of thought.
>> Perspective p. 593

REPORTS

608 Fermi Surface and Pseudogap Evolution in a Cuprate Superconductor
Y. He et al.
Simultaneous Transitions in Cuprate Momentum-Space Topology and Electronic Symmetry Breaking
K. Fujita et al.
Methyl radicals that form at isolated iron sites in a silica matrix form gas-phase products and do not deposit solid carbon.
Restoration of Large Damage Volumes in Polymers
S. R. White et al.
A sequential set of gelation and polymerization reactions are used for patching large gaps in a polymer sample.
>> Perspective p. 591

620 In Situ TEM Observation of a Microcrucible Mechanism of Nanowire Growth
R. Boston et al.
Nanowire growth from a microcrucible catalyst particle at the bottom of the wire is observed in situ.
Spatially Distributed Local Fields in the Hippocampus Encode Rat Position
G. Aparawi et al.
Electrical fields within the hippocampus can now be decoded to reveal a rat’s location.
Vascular and Neurogenic Rejuvenation of the Aging Mouse Brain by Young Systemic Factors
L. Katsimpari et al.
A circulating growth factor promotes youthful muscles and brains in aged mice.
Identification of LRRCB Heteromers as an Essential Component of the Volume-Regulated Anion Channel VRAC
F. K. Voss et al.
Components of an elusive swelling-activated anion channel are identified and form a structurally new class of channel.
Gibberellin ActsPositively Then Negatively to Control Onset of Flower Formation in Arabidopsis
N. Yamaguchi et al.
Inflorescence architecture is shaped by a biphasic signaling network involving the plant hormone gibberelin.
Cancer Immunotherapy Based on Mutation-Specific CD4+ T Cells in a Patient with Epithelial Cancer
E. Tran et al.
T cells specific for a mutation expressed by tumor cells show antitumor activity in a patient with an epithelial cancer.
The Transcription Factor Gata6 Links Tissue Macrophage Phenotype and Proliferative Renewal
M. Rosas et al.
The major self-renewing population of peritoneal macrophages is under discrete tissue-selective transcriptional control.
Restoring Systemic GDF11 Levels Reverses Age-Related Dysfunction in Mouse Skeletal Muscle
M. Sinha et al.
A circulating growth factor promotes youthful muscles and brains in aged mice.
>> News story p. 570; Report p. 630