EDITORIAL
1538  The Enlightenment Returns  Kurt Gottfried and Harold Varmus

NEWS OF THE WEEK
1546  Projections of Climate Change Go From Bad to Worse, Scientists Report
1548  Senate Majority Leader Hands NSF a Gift to Serve the Exceptionally Gifted
1549  Stronger Research Just One Item on Drug Agency’s Wish List
1550  Recipe for Rice Domestication Required Millennia
>> Report p. 1607
1551  An Unseen Link May Solve the Mystery of the Sun’s Superhot Corona
>> Report p. 1602
1551  From Science’s Online Daily News Site
1552  For Congress and NIH, Headaches Ahead on Stem Cells
1552  Stem Cell Center Looks to Recast Itself in Supporting Role
1553  From the Science Policy Blog

NEWS FOCUS
1554  Rewiring Faulty Circuits in the Brain
>> Research Article p. 1578; Science Express Report by V. Gradinaru et al.; Science Podcast
1557  A Lifetime of Work Gone to Waste?
1558  Exxon Valdez Turns 20

LETTERS
1560  Pandemic Influenza: An Inconvenient Mutation  S. P. Layne et al.
Romanian Expatriates Face Career Obstacles  Z. Simon
Reversible Exploration Not Worth the Cost  S. C. Schon

CORRECTIONS AND CLARIFICATIONS

BOOKS ET AL.
1562  Sustaining Life  E. Chivian and A. Bernstein, Eds., reviewed by D. P. Mindell
1563  Surviving 1,000 Centuries  R.-M. Bonnet and L. Wolfer, reviewed by G. F. Bignami

POLICY FORUM
1564  Monitoring and Regulating Offshore Stem Cell Clinics  S. Kiatponsan and D. Sipp

PERSPECTIVES
1566  Flexible Electronics  B. D. Gates
>> Report p. 1590
1567  Two-in-One Designer Antibodies  P. W. H. I. Parren and D. R. Burton
>> Report p. 1610
1568  Dynamic DNA Methylation  J. A. Law and S. E. Jacobsen
>> Report p. 1600
1570  Fullerides in a Squeeze  E. Tosatti
>> Report p. 1585
1571  Stiffer Than Steel  J. D. W. Madden
>> Research Article p. 1575
1572  Copper Puts Arenes in a Hard Position  R. E. Maleczka Jr.
>> Report p. 1593

BREVIA
1574  Flagellum Mediates Symbiosis  T. Shimoyama et al.
A bacterium uses its flagellum to grip its archaeal symbiotic partner and to stimulate hydrogen consumption.

CONTENTS continued >>

COVER
Movement trajectories, each recorded during a 1-hour time period, for rats with brain lesions that reduce dopamine signaling. These animals serve as a model of Parkinson’s disease and display severe difficulty in initiating movements, as illustrated by the white trajectories (on black background) showing limited locomotion. Black trajectories (on white background) illustrate the recovery of locomotive activity induced by electrical stimulation of the dorsal columns of the spinal cord. See page 1578.

Photo illustration: Yoel Kats/Science; images: Per Petersson

DEPARTMENTS
1535  This Week in Science
1539  Editors’ Choice
1540  Science Staff
1543  Random Samples
1545  Newsmakers
1620  New Products
1621  Science Careers

www.sciencemag.org  SCIENCE VOL 323  20 MARCH 2009 Published by AAAS
RESEARCH ARTICLES

1575 Giant-Stroke, Superelastic Carbon Nanotube Aerogel Muscles
A. E. Aliev et al.
Applying a high voltage to very low density sheets of carbon nanotubes causes rapid expansion in one direction.
>> Perspective p. 1571

1578 Spinal Cord Stimulation Restores Locomotion in Animal Models of Parkinson’s Disease
R. Fuentes et al.
Epidural stimulation of spinal neural pathways produces specific shifts in activity in neural circuits affecting movement.
>> News story p. 1554; Science Express Report by V. Gradinaru et al.

REPORTS

1582 Alfvén Waves in the Lower Solar Atmosphere
D. B. Jess et al.
A special type of plasma wave has been observed that can heat the solar atmosphere to millions of degrees Celsius.
>> News story p. 1551; Science Podcast

1585 The Disorder-Free Non-BCS Superconductor Cs$_3$C$_{60}$ Emerges from an Antiferromagnetic Insulator Parent State
Y. Takabayashi et al.
A well-ordered body-centered cubic phase of Cs$_3$C$_{60}$ reveals a pressure-driven transition from an insulator to a superconductor.
>> Perspective p. 1570

1590 Omnidirectional Printing of Flexible, Stretchable, and Spanning Silver Microelectrodes
B. Y. Ahn et al.
Colloidal silver particles can be formed into flexible electrodes of arbitrary shape in three dimensions.
>> Perspective p. 1566

1593 A Meta-Selective Copper-Catalyzed C–H Bond Auration
R. J. Phipps and M. J. Gaunt
A copper catalyst functionalizes benzene derivatives at ring positions complementary to those accessed by standard methods.
>> Perspective p. 1572

1597 The Burgess Shale Anomalocaridid Hurdia and Its Significance for Early Euarthropod Evolution
A. C. Daley et al.
Hurdia, a Cambrian fossil, clarifies the morphology and evolution of early arthropod limbs and head.

1600 A Role for RNAi in the Selective Correction of DNA Methylation Defects
F. K. Teixeira et al.
An RNA interference–dependent DNA methylation rescue system helps to preserve a subset of DNA methylation marks in Arabidopsis.
>> Perspective p. 1568

1605 Genetic Incompatibility Drives Sex Allocation and Maternal Investment in a Polymorphic Finch
S. R. Pyke and S. C. Griffith
Female Gouldian finches bias the sex of their offspring on the basis of their partner’s color phenotype.

1607 The Domestication Process and Domestication Rate in Rice: Spikelet Bases from the Lower Yangtze
D. Q. Fuller et al.
Remains of domestic and wild rice trace the process of rice domestication in China to between 6900 and 6600 years ago.
>> News story p. 1550

1610 Variants of the Antibody Herceptin That Interact with HER2 and VEGF at the Antigen Binding Site
J. Bostrom et al.
The antigen binding site of a therapeutic antibody for cancer simultaneously binds two proteins required for tumor growth.
>> Perspective p. 1567

1614 Ankyrin-G Promotes Cyclic Nucleotide–Gated Channel Transport to Rod Photoreceptor Sensory Cilia
K. Kizhatil et al.
The assembly and function of key photoreceptor proteins in neonatal mouse retinas is mediated by the protein ankyrin-G.

1617 The Surprising Power of Neighborly Advice
D. T. Gilbert et al.
A stranger’s reaction to a social situation is a more accurate guide to our own reaction than is a written description of the situation.
>> Science Podcast
A Hitch in Plans for ‘Sunshade Earth’

Bacterial FIC Proteins AMP Up Infection

γ-Secretase Heterogeneity in the Aph1 Subunit: Relevance for Alzheimer’s Disease

Bringing Community Into Translational Research

Looking Up Your Career at the Library

Tooling Up: The Informational Interview

Obese mice have heart conditions.

Dimmer future?