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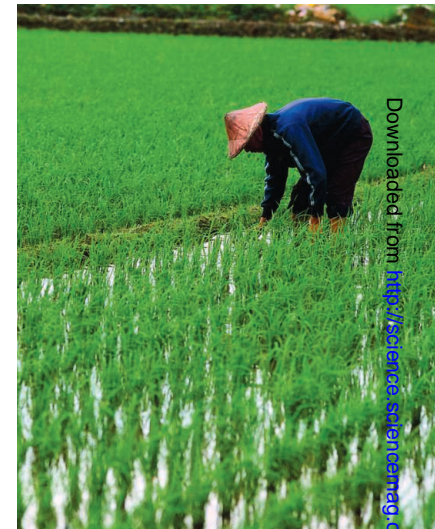
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COVER

Beach mice (*Peromyscus polionotus*) have recently colonized the white sandy beaches of Florida's Gulf Coast, where they have evolved a novel coat color pattern that camouflages them from predators. In a Report on page 1062, Manceau *et al.* show how small changes in the level and location of expression of a single gene in the mouse embryo cause large changes in adult color pattern.

Photo: Joel Sartore/joelsartore.com

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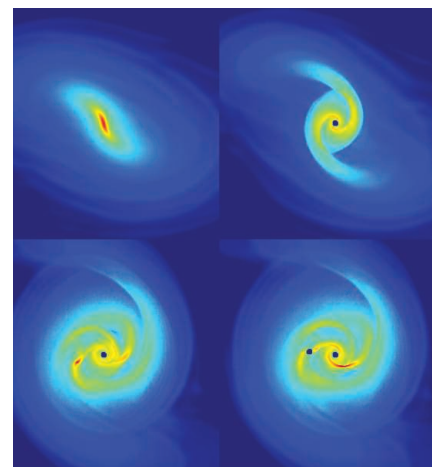
RESEARCH ARTICLE

- 1036 **Structure of DNMT1-DNA Complex Reveals a Role for Autoinhibition in Maintenance DNA Methylation**
J. Song et al.
The eukaryote maintenance DNA methyltransferase discriminates against de novo CpG methylation sites.
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REPORTS

- 1040 **The Formation and Fragmentation of Disks Around Primordial Protostars**
P. C. Clark et al.
Numerical simulations show that disks around the first stars in the universe were gravitationally unstable and fragmented.
- 1043 **Suppression of Collisional Shifts in a Strongly Interacting Lattice Clock**
M. D. Swallows et al.
Increasing atomic interactions improved the accuracy and precision of a clock formed from atoms trapped in an optical lattice.

- 1046 **Direct Measurement of Long-Range Third-Order Coherence in Bose-Einstein Condensates**
S. S. Hodgman et al.
Correlation of arrival times of metastable helium atoms is consistent with long-range coherence to higher orders.
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J. J. Scepaniak et al.
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- 1052 **The S_3^- Ion Is Stable in Geological Fluids at Elevated Temperatures and Pressures**
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B. A. Potter et al.
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M. Manceau et al.
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M. S. Asuncion et al.
Argentine fire ants have spread around the world from a population that was first established a century ago in North America.
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S. H. Anderson et al.
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S. L. Haigo and D. Bilder
The ellipsoid shape of the *Drosophila* egg is controlled by global tissue revolutions that polarize the matrix.



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- 1074 **Development of Transgenic Fungi That Kill Human Malaria Parasites in Mosquitoes**
W. Fang et al.
Insect-specific fungi can be used to deliver a range of toxins, antibodies, and other agents to kill vector-borne pathogens.
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E. R. Porrello et al.
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- 1081 **Translation-Independent Localization of mRNA in *E. coli***
K. Nevo-Dinur et al.
Sequences within messenger RNAs target them to sites in the bacterial cell where the resulting proteins function.
>> *Perspective p. 1021*

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SCIENCEONLINE

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Isotopic Evidence of Cr Partitioning into Earth's Core

F. Moynier et al.

Chromium isotopes in meteorites reveal Earth's accretion history.

10.1126/science.1199597

Meteoritic Clues Point Chromium Toward Earth's Core

W. F. McDonough

10.1126/science.1203353

Catastrophic Drought in the Afro-Asian Monsoon Region During Heinrich Event 1

J. C. Stager et al.

An extreme megadrought occurred in the Afro-Asian monsoon region during an iceberg melting episode 50,000 years ago.

10.1126/science.1198322

Chronic Mucocutaneous Candidiasis in Humans with Inborn Errors of Interleukin-17 Immunity

A. Puel et al.

Chronic yeast infections in the absence of other infections result from genetic deficiencies in proinflammatory host responses.

10.1126/science.1200439

Directional Switching of the Kinesin Cin8 Through Motor Coupling

J. Roostal et al.

A molecular motor switches direction upon interacting with individual microtubules or antiparallel microtubules.

10.1126/science.1199945

TECHNICAL COMMENTS

Comment on "Mantle Flow Drives the Subsidence of Oceanic Plates"

M. B. Croon et al.

Full text at www.sciencemag.org/cgi/content/full/331/6020/1011-a

Response to Comment on "Mantle Flow Drives the Subsidence of Oceanic Plates"

C. Adam and V. Vidal

Full text at www.sciencemag.org/cgi/content/full/331/6020/1011-b

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Highlights From Our Daily News Coverage

Ancient Britons Used Skulls as Cups

Gruesome goblets were carefully fashioned and may have been used to serve up enemies' brains.

<http://scim.ag/skull-cups>

Rising Temperatures Bringing Bigger Floods

A new study suggests that CO₂ emissions have boosted the risk of intense precipitation and consequent flooding.

<http://scim.ag/more-floods>

The Genetics of Long-Distance Flying

Researchers have discovered the first gene linked to migratory behavior in birds.

<http://scim.ag/long-flights>

SCIENCE SIGNALING

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The Signal Transduction Knowledge Environment

22 February issue: <http://scim.ag/ss022211>

RESEARCH ARTICLE: ER Stress Inhibits mTORC2 and Akt Signaling Through GSK-3 β -Mediated Phosphorylation of Rictor

C.-H. Chen et al.

Cellular stress attenuates growth factor signaling through a phosphorylation event that blocks substrate access to the kinase complex mTORC2.

RESEARCH ARTICLE: The Specificity of Innate Immune Responses Is Enforced by Repression of Interferon Response Elements by NF- κ B p50

C. S. Cheng et al.

PODCAST

A. Hoffmann and A. M. VanHook

A transcriptional repressor acts as a gatekeeper to restrict the innate immune response to specific stimuli.

MEETING REPORT: Receptors, Signaling Networks, and Disease

N. Cuesta et al.

This meeting in Madrid focused on signaling by immune cells and regulation of and signaling by G protein-coupled receptors.

SCIENCE CAREERS

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Free Career Resources for Scientists

Experimental Error: Most Likely to Secede

A. Ruben

No talented child ever says, "I want to pipette repetitively when I grow up."

<http://scim.ag/htL3Zt>

A Nobel Prize at 36

E. Pain

Last year, Konstantin Novoselov became the youngest physics laureate since Brian Josephson in 1973.

<http://scim.ag/gZDlKB>

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Integrating Medicine and Science

23 February issue: <http://scim.ag/stm022311>

PERSPECTIVE: Tuberculosis Immunopathology—The Neglected Role of Extracellular Matrix Destruction

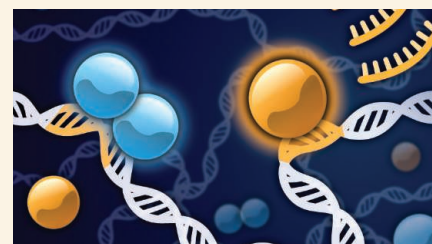
P. T. Elkington et al.

Compounds that inhibit matrix metalloproteinases should be tested for their ability to limit tuberculosis morbidity and mortality.

RESEARCH ARTICLE: Pump-Probe Imaging Differentiates Melanoma from Melanocytic Nevi

T. E. Matthews et al.

Multiphoton imaging reveals chemical changes in melanoma compared to benign nevi and could enhance current clinical diagnostic protocols.



SCIENCE SIGNALING

Competition at the promoter.

RESEARCH ARTICLE: Micro-NMR for Rapid Molecular Analysis of Human Tumor Samples

J. B. Haun et al.

PODCAST

R. Weissleder and O. M. Smith

A portable micro-nuclear magnetic resonance device enables rapid molecular diagnosis from scarce cancer cells in fine-needle aspirates from human tumors.

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On the 25 February Science Podcast: fighting malaria with transgenic fungi, exploiting genomics, your letters to *Science*, and more.

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<http://scim.ag/genome10>

Human Genome 10th Anniversary

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