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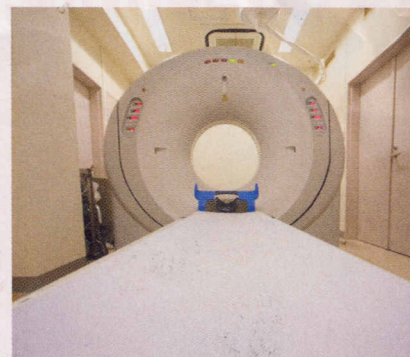
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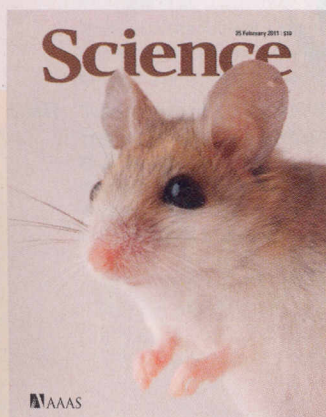
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COVER

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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J. Song et al.
The eukaryote maintenance DNA
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REPORTS

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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
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M. D. Swallows et al.
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accuracy and precision of a clock formed from
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- 1046** Direct Measurement of Long-Range
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S. S. Hodgman et al.
Correlation of arrival times of metastable
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- 1049** Synthesis, Structure, and Reactivity
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J. J. Scepaniak et al.
A reactive iron compound bound to nitrogen
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- 1052** The S_3^- Ion Is Stable in Geological Fluids
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G. S. Pokrovski and L. S. Dubrovinsky
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- 1058** A Terminal Pleistocene Child Cremation
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Cremated remains and a burial site in central
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- 1062** The Developmental Role of Agouti
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M. Manceau et al.
A regulatory mutation affecting expression
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- 1066** Global Invasion History of the Fire Ant
Solenopsis invicta
M. S. Asuncion et al.
Argentine fire ants have spread around
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- 1068** Cascading Effects of Bird Functional
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S. H. Anderson et al.
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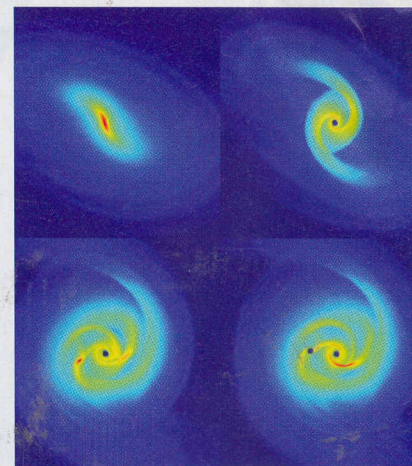
- 1071** Global Tissue Revolutions in a
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The ellipsoid shape of the *Drosophila* egg
is controlled by global tissue revolutions
that polarize the matrix.

- 1074** Development of Transgenic Fungi That Kill
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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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- 1078** Transient Regenerative Potential of the
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E. R. Porrello et al.
The heart in a newborn mouse can rebuild
itself after injury, but this regenerative
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- 1081** Translation-Independent Localization of
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K. Nevo-Dinur et al.
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SCIENCEONLINE

SCIENCEEXPRESS

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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. Roostalu et al.
A molecular motor switches direction upon interacting with individual microtubules or antiparallel microtubules.
10.1126/science.1199945

TECHNICALCOMMENTS

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

SCIENCENOW

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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

www.sciencesignaling.org

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

www.sciencereaders.org/career_magazine
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/gZDIkB>

SCIENCE TRANSLATIONAL MEDICINE

www.sciencetranslationalmedicine.org

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.

