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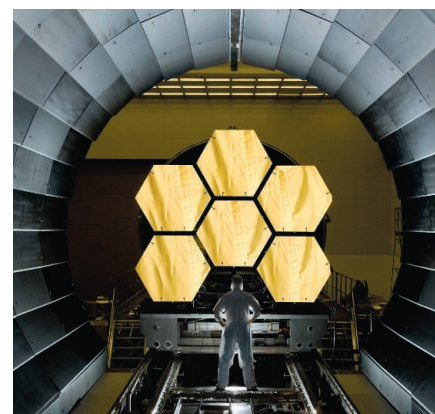
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An anti-government demonstrator shows the victory sign in Tahrir Square on 7 February 2011 in Cairo, Egypt, during protests that led to the resignation of President Hosni Mubarak. A special News Focus package beginning on page 278 examines the prospects for reforming science and higher education in Egypt as the nation prepares for parliamentary elections planned for later this year.

Photo: John Moore/Getty Images

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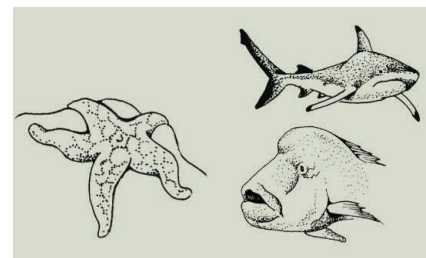
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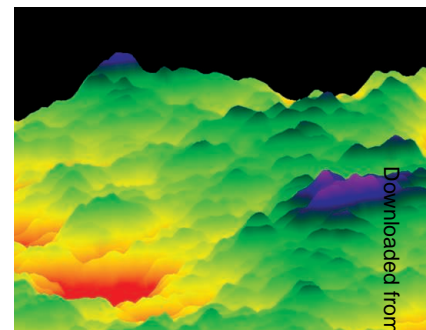
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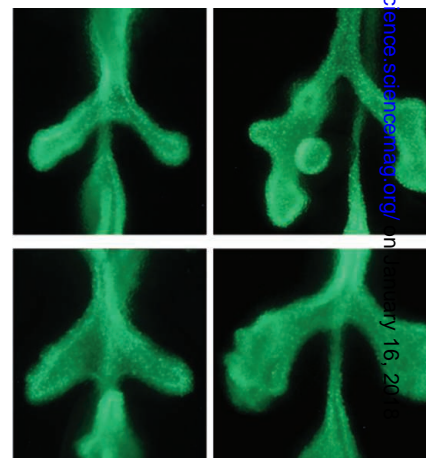
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A Large and Persistent Carbon Sink in the World's Forests

Y. Pan et al.

Net average global annual uptake of atmospheric carbon dioxide by forests was 1.1 petagrams of carbon, roughly one-sixth of fossil fuel emissions.
10.1126/science.1201609

Sequence and Structural Convergence of Broad and Potent HIV Antibodies That Mimic CD4 Binding

J. F. Scheid et al.

Anti-HIV broadly neutralizing antibodies with similar specificities and modes of binding were found in multiple HIV-infected individuals.
10.1126/science.1207227

Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips

B. Sparrow et al.

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10.1126/science.1207745

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A protein that drives the growth of leukemia does so only when it carries a specific posttranslational modification.
10.1126/science.1201662

The Plant Cell Wall–Decomposing Machinery Underlies the Functional Diversity of Forest Fungi

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Comparative genomic analysis of dry rot fungus shows both convergent evolution and divergence among fungal decomposers.
10.1126/science.1205411

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Diver Snaps First Photo of Fish Using Tools

The blackspot tuskfish cracks open shells with a rock.
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Polar Bears Rooted in Ireland

DNA shows polar bears descended from a female Irish brown bear.
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<http://scim.ag/oldrecord>

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The Signal Transduction Knowledge Environment
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RESEARCH ARTICLE: The Distinct Roles of Two GPCRs, MrgprC11 and PAR2, in Itch and Hyperalgesia

Q. Liu et al.
Sensory neurons perceive itch and heat-induced pain through two different receptors.

RESEARCH RESOURCE: Real-Time Imaging of Notch Activation with a Luciferase Complementation-Based Reporter

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Luciferase complementation imaging enables quantitative analyses of Notch pathway dynamics in real time in living cells.

PERSPECTIVE: HIF Takes It Up a Notch

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The interaction of the transcription factor HIF- α with the Notch receptor promotes cell fate specification and maintenance.

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Find out what Hph, PHD, and EGLN mean in the world of cell signaling.

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13 July issue: <http://scim.ag/stm071311>

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An unexpected link between Parkinson's disease and Gaucher's disease is explained at the molecular level.

RESEARCH ARTICLE: Rational Design of a Meningococcal Antigen Inducing Broad Protective Immunity

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RESEARCH ARTICLE: A Critical Subset Model Provides a Conceptual Basis for the High Antiviral Activity of Major HIV Drugs

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PERSPECTIVE: Drug Effectiveness Explained—The Mathematics of Antiviral Agents for HIV

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Disruption of the cooperative action of multiple copies of a drug target explains the high antiviral activity of the most active HIV drugs.

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D. Jensen

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E. Pain

Portuguese plant researcher Célia Cabral cofounded a company to produce essential oils.
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