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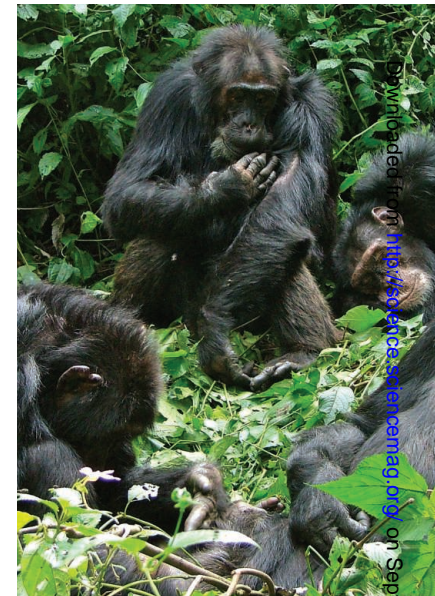
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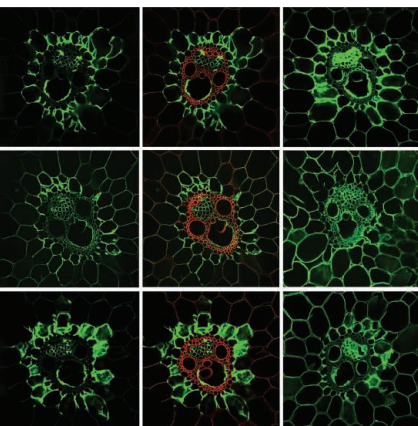
## COVER

The lower hemisphere of a fast-spinning Earth shown 2 hours after a giant impact. Colors denote the silicate mantles and iron cores of Earth and the impactor. The debris evolves into a Moon-forming disk composed primarily of material from Earth's mantle, explaining the isotopic similarity between Earth and the Moon. In this model, the fast-spinning Earth is slowed by an orbital resonance between the Moon and the Sun. See pages 1040, 1047, and 1052.

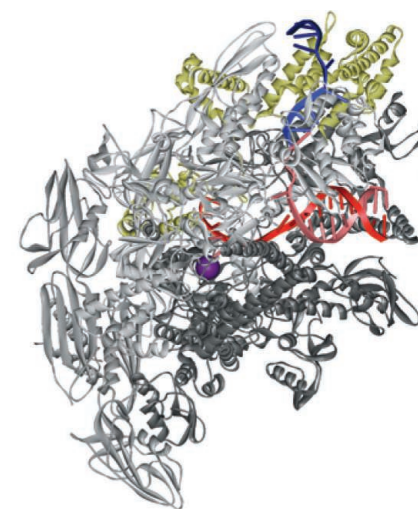
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## SCIENCEEXPRESS

[www.sciencexpress.org](http://www.sciencexpress.org)

Publication Ahead of Print

### Crystal Structure of the Calcium Release-Activated Calcium Channel Orai

X. Hou et al.

10.1126/science.1228757

### Organization of the Influenza Virus Replication Machinery

A. Moeller et al.

10.1126/science.1227270

### The Structure of Native Influenza Virion Ribonucleoproteins

R. Arranz et al.

10.1126/science.1228172

### Visualizing the Influenza Genome

Y. J. Tao and W. Zheng

10.1126/science.1231588

### The Spatial and Temporal Origin of Chandelier Cells in Mouse Neocortex

H. Taniguchi et al.

10.1126/science.1227622

### Phase Transformations and Metallization of Magnesium Oxide at High Pressure and Temperature

R. S. McWilliams et al.

10.1126/science.1229450

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New photographs show unusual features in the great physicist's brain.

[http://scim.ag/Einstein\\_Genius](http://scim.ag/Einstein_Genius)

### Rainforest Insects Hear Like Humans

Katydid may listen with their legs, but their ears are almost human.

[http://scim.ag/Katydid\\_Ears](http://scim.ag/Katydid_Ears)

### Bdelloids Surviving on Borrowed DNA

The secret to the rotifers' success may be their "genetic mosaic."

<http://scim.ag/Genetic-Mosaic>

## SCIENCE SIGNALING

[www.sciencesignaling.org](http://www.sciencesignaling.org)

The Signal Transduction Knowledge Environment

**20 November issue: <http://scim.ag/ss112012>**

### RESEARCH ARTICLE: Attractor Landscape Analysis Reveals Feedback Loops in the p53 Network that Control the Cellular Response to DNA Damage

M. Choi et al.

State-space analysis of the p53 network identifies a therapeutic strategy for treating cancer.

### RESEARCH ARTICLE: Sumoylation Silences Heterodimeric TASK Potassium Channels Containing K2P1 Subunits in Cerebellar Granule Neurons

L. D. Plant et al.

Potassium channels that respond to the anesthetic halothane are electrically silent when sumoylated.

### RESEARCH ARTICLE: GPRC5B Activates Obesity-Associated Inflammatory Signaling in Adipocytes

Y. Kim et al.

Mice lacking an orphan G protein-coupled receptor show reduced inflammatory signaling and obesity.

### PERSPECTIVE: Sequential Conformational Rearrangements Dictate the Dynamics of Class C GPCR Activation

J. R. Lane and M. Canals

Fluorescence probes reveal the roles of domain rearrangement and dimerization in GPCR activation.

### PODCAST

R. J. Lefkowitz and A. M. VanHook

### ST NETWATCH: The Nobel Prize in Chemistry 2012

The Nobel Prize Committee honors work on the structure and function of G protein-coupled receptors.

## SCIENCE TRANSLATIONAL MEDICINE

[www.sciencetranslationalmedicine.org](http://www.sciencetranslationalmedicine.org)

Integrating Medicine and Science

**21 November issue: <http://scim.ag/stm112112>**

### FOCUS: Treating Epilepsy with a Light Potassium Diet

C. Bernard

### RESEARCH ARTICLE: Optogenetic and Potassium Channel Gene Therapy in a Rodent Model of Focal Neocortical Epilepsy

R. C. Wykes et al.

Light-activated gene therapy suppresses seizures in a rodent model of epilepsy.

### RESEARCH ARTICLE: Mesenchymal Stem Cells Regulate Blood-Brain Barrier Integrity Through TIMP3 Release After Traumatic Brain Injury

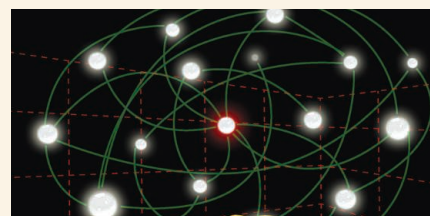
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TIMP3 mediates the beneficial effects of mesenchymal stem cells on blood-brain barrier integrity after brain injury.

### RESEARCH ARTICLE: Modulation of Vigilance in the Primary Hypersomnias by Endogenous Enhancement of GABA<sub>A</sub> Receptors

D. A. Rye et al.

A cerebrospinal fluid component in excessively sleepy people mimics the actions of sedatives.



## SCIENCE SIGNALING

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## SCIENCE CAREERS

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A. Ruben

Not all research is easily justified—but what do you do when you can't even justify it to yourself?

### Successful Careers: A Matter of Confidence

S. A. Holgate

Identifying and addressing confidence issues can help early-career scientists make swifter progress.

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