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HIV/AIDS: Follow the Money

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A. S. Fauci et al.
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The Metamorphosis of Supernova SN 2008D/XRF 080109: A Link Between Supernovae and GRBs/Hypernovae
P. A. Mazali et al.
The spectra of a recent supernova evolved from that of a more energetic event to that of a less energetic one, providing a link between previous observations.
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MEDICINE
Human CHN1 Mutations Hyperactivate α2-Chimaerin and Cause Duane’s Retraction Syndrome
N. Miyake et al.
A signaling protein that helps nerve fibers find their correct target muscles is required for innervation of the eye muscles and, if defective, causes an eye movement disorder.
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Tail Reconnection Triggering Substorm Onset
V. Angelopoulos et al.
Satellite and ground-based data show that reconnection of magnetic field lines in Earth’s magnetotail precedes dramatic aurora displays and is the source of magnetic substorms.
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PERSPECTIVE: The Elusive Onset of Geomagnetic Substorms
A. A. Petrukovich
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The Future of the Internet: And How to Stop It J. L. Zittrain, reviewed by B. M. Frischmann
Davenport’s Dream 21st Century Reflections on Heredity and Eugenics J. A. Witkowski and J. R. Inglis, Eds., reviewed by R. Pollock

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GEOCHEMISTRY
A Quantitative Link Between Recycling and Osmium Isotopes A. V. Sobolev et al.
Osmium isotope data and metal concentrations from Icelandic lavas show that the underlying mantle contains some recycled oceanic crust that is 1 to 2 billion years old.

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MOLECULAR BIOLOGY
An Argonaute Transports siRNAs from the Cytoplasm to the Nucleus S. Guang et al.
A protein similar to one that binds small cytoplasmic RNAs transports small RNAs into the nucleus, where they participate in RNA-based nuclear silencing processes.
>> Perspective p. 496
PLANT SCIENCE
BSKs Mediate Signal Transduction from the Receptor Kinase BR1 in Arabidopsis
W. Tang et al.
When a plant membrane receptor is activated by a steroid hormone, two kinases are phosphorylated that ultimately regulate gene expression and development.

ECOLOGY
One-Third of Reef-Building Corals Face Elevated Extinction Risk from Climate Change and Local Impacts
K. E. Carpenter et al.
The viability of the world’s major coral reefs is endangered both by direct human disturbance and by disease and bleaching events brought on by climate change.

CELL BIOLOGY
Eco1-Dependent Cohesin Acetylation During Establishment of Sister Chromatid Cohesion
T. Rolef Ben-Shahar et al.
A molecular determinant for the establishment of sister chromatid cohesion.

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ErDj5 Is Required as a Disulfide Reductase for Degradation of Misfolded Proteins in the ER
R. Ushioda et al.
A disulfide reductase found in the endoplasmic reticulum cleaves the disulfide bonds of misfolded proteins so they can be transported into the cytoplasm for degradation.

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DNA Events Manipulating the Metazoan Mitochondrial Genome with Targeted Restriction Enzymes
H. Xu, S. Z. DeLuca, P. H. O’Farrell
Flies with mutant mitochondria—generated by introduction of restriction enzymes—show many of the same phenotypes as humans with mitochondrial mutations.
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