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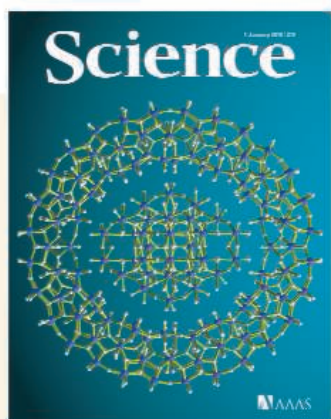
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Crystal structure of a molybdenum oxide nanowheel, 2.6 nanometers in diameter, around a smaller molybdenum oxide cluster. *Miras et al.* (page 72; related Perspective page 38) used a controlled-flow reactor to show that the central core serves as a transient template for the self-assembly of the nanowheel and is ultimately ejected to yield a hollow finished product.

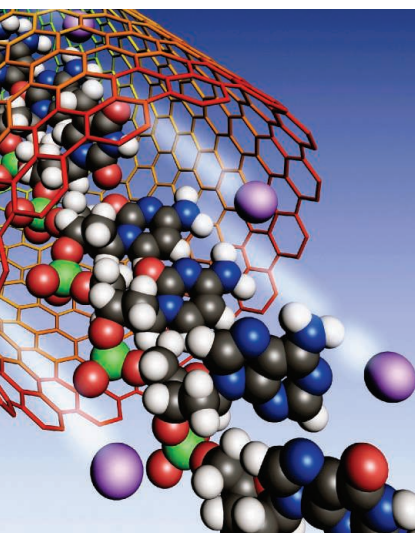
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Detection of Gamma-Ray Emission from the Vela Pulsar Wind Nebula with AGILE

A. Pellizzoni et al.

Pulsar wind nebulae could account for some of the yet unidentified Galactic gamma-ray sources.
10.1126/science.1183844

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G. A. Brennecka et al.

Variable abundances of meteorite isotopes may require correcting the lead-based age of the solar system by 5 million years.
10.1126/science.1180871

Darwinian Evolution of Prions in Cell Culture

J. Li et al.

When propagated in vitro, prion strains demonstrate adaptability and selection.
10.1126/science.1183218

Protein PRDM9 Is a Major Determinant of Meiotic Recombination Hotspots in Humans and Mice

F. Baudat et al.

10.1126/science.1183439

Drive Against Hotspot Motifs in Primates Implicates the PRDM9 Gene in Meiotic Recombination

S. Myers et al.

10.1126/science.1182363

Prdm9 Controls Activation of Mammalian Recombination Hotspots

E. D. Parvanov et al.

A chromatin-modifying enzyme functions in the determination of recombination loci within the genome.

10.1126/science.1181495

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Primates clear an important hurdle in humanlike mastery of fire.

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Women's fingers are more sensitive, but that's just because they are smaller than men's are.

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RESEARCH ARTICLE: Regulation of Epidermal Growth Factor Receptor Trafficking by Lysine Deacetylase HDAC6

Y. Lissanu Deribe et al.

HDAC6 sets a brake that slows down the delivery of activated epidermal growth factor receptors to the degradative compartment.

RESEARCH ARTICLE: Tumor Suppression by PTEN Requires the Activation of the PKR-eIF2 α Phosphorylation Pathway

Z. Mounir et al.

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RESEARCH ARTICLE: Cbl Controls EGFR Fate by Regulating Early Endosome Fusion

G. D. Visser Smit et al.

The E3 ubiquitin ligase Cbl mediates the fusion of early endosomes necessary to target EGFR for lysosomal degradation.

PERSPECTIVE: Channeling Calcium—A Shared Mechanism for Exocytosis-Endocytosis Coupling

S. S. Vogel

Exocytotic insertion of calcium channels can couple exocytosis with endocytosis.

SCIENCE CAREERS

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A Scientist's Infectious Enthusiasm

S. Webb

Benjamin tenOver is an unconventional virologist who is working to make his discoveries clinically relevant.

Coming to America: Doing a Postdoc in the U.S.

L. Laursen

The logistics can be intimidating, but a postdoc in the United States is rewarding.

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PERSPECTIVE: PPAR γ Activation—A Potential Treatment for Pulmonary Hypertension

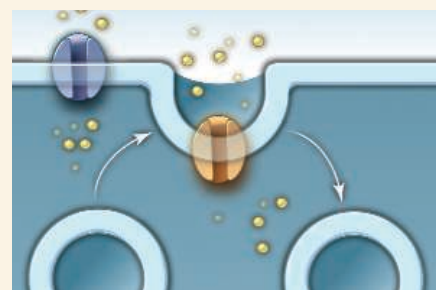
G. Hansmann and R. T. Zamanian

A new target is identified to thwart heart failure.

PERSPECTIVE: α_{2A} -Adrenergic Receptors in the Genetics, Pathogenesis, and Treatment of Type 2 Diabetes

S. B. Liggitt

Results originating from rat genetics make a compelling case for the ADRA2A locus and type 2 diabetes in humans.



SCIENCE SIGNALING

Coupling exocytosis with endocytosis.

RESEARCH ARTICLE: Measurement and Clinical Monitoring of Human Lymphocyte Clonality by Massively Parallel V-D-J Pyrosequencing

S. D. Boyd et al.

Rapid sequencing of immune receptor loci can provide direct detection and tracking of immune diversity.

REPORT: Seasonal Influenza Vaccine Provides Priming for A/H1N1 Influenza Immunization

G. Del Giudice et al.

A vaccine currently used to protect against H1N1 is more effective when co-injected with an adjuvant and seasonal flu vaccine.

SCIENCE PODCAST

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Download the 1 January *Science* Podcast to hear about caterpillars masquerading as twigs, the chief scientist of Russia's Space Research Institute, and clues to cancer in Tasmanian devils.

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Science Policy News and Analysis

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