

Science

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Science Without Borders

AAAS ANNUAL MEETING

17–21 February 2011 | Washington, DC

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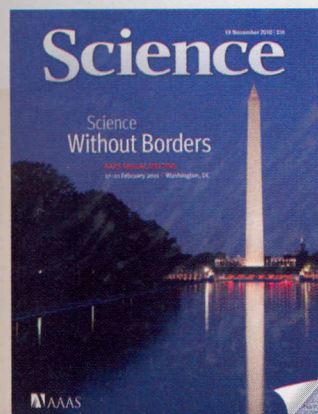
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COVER

View of the Washington Monument in Washington, DC, site of the AAAS Annual Meeting, 17 to 21 February 2011. The meeting's theme—*Science Without Borders*—integrates the practice of science, in both research and teaching, which uses multidisciplinary approaches to problem-solving, crosses conventional borders, and takes into consideration the diversity of investigators and students. The preliminary program begins on page 1118.

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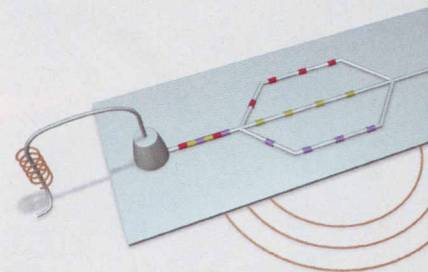
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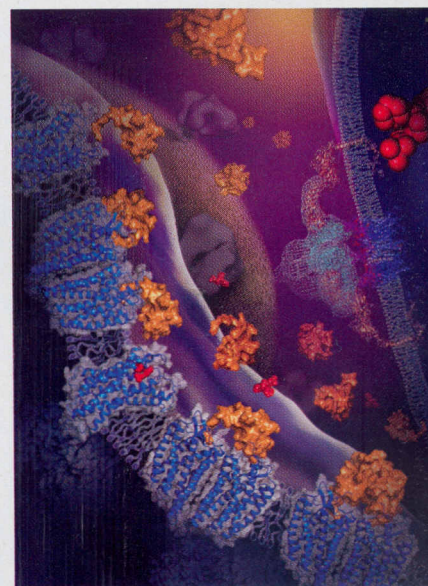
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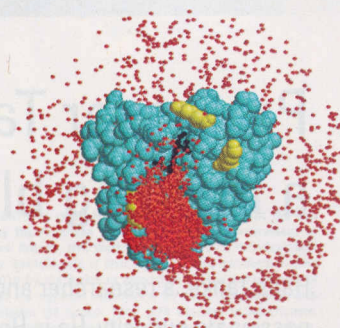
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A Giant Planet Around a Metal-Poor Star of Extragalactic Origin

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A planet is observed to orbit a star whose properties are different from those of all other known planet-hosting stars.

10.1126/science.1193342

Evidence of Supersolidity in Rotating Solid Helium

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Measurements on rotating frozen helium support the formation of a quantum, or supersolid, phase.

10.1126/science.1196409

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10.1126/science.1194167

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Glucose and Weight Control in Mice with a Designed Ghrelin O-Acyltransferase Inhibitor

B. P. Barnett et al.

A drug inhibiting the activation of ghrelin, a peptide that promotes weight gain, has beneficial metabolic effects in mice.

10.1126/science.1196154

Arabidopsis Type I Metacaspases Control Cell Death

N. S. Coll et al.

An ancient link between cell death control and innate immune receptor function has been discovered in plants.

10.1126/science.1194980

TECHNICALCOMMENTS

Comment on "Single-Crystal X-ray Structure of 1,3-Dimethylcyclobutadiene by Confinement in a Crystalline Matrix"

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Full text at www.sciencemag.org/cgi/content/full/330/6007/1047-c

Comment on "Single-Crystal X-ray Structure of 1,3-Dimethylcyclobutadiene by Confinement in a Crystalline Matrix"

I. V. Alabugin et al.

Full text at www.sciencemag.org/cgi/content/full/330/6007/1047-d

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Full text at www.sciencemag.org/cgi/content/full/330/6007/1047-e

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Neandertal Children Developed on the Fast Track

Tooth analysis suggests that our close cousins matured faster than we did.

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RESEARCH ARTICLE: Solution of the Structure of the TNF-TNFR2 Complex

Y. Mukai et al.

Structural differences in the binding of tumor necrosis factor to its two receptors may aid in the development of receptor-specific therapeutics.

RESEARCH ARTICLE: Activation of STIM1-Orai1 Involves an Intramolecular Switching Mechanism

M. K. Korzeniowski et al.

PERSPECTIVE: Calcium Signaling by STIM and Orai—Intimate Coupling Details Revealed

Y. Wang et al.

An intramolecular interaction within the protein STIM1 prevents untimely refilling of intracellular calcium stores.

PERSPECTIVE: Frizzled Signaling— α_0 and Rab5 at the Crossroads of the Canonical and PCP Pathways?

D. Strutt and J.-P. Vincent

Rab5, a key effector of endocytosis, binds to Frizzled proteins and modulates their trafficking and signaling.

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PERSPECTIVE: News from the Brain—The GPR124 Orphan Receptor Directs Brain-Specific Angiogenesis

E. Dejana and D. Nyqvist

A G protein-coupled receptor may represent a new therapeutic target for vascular pathologies in the central nervous system.

RESEARCH ARTICLE: Identification of Hematopoietic Stem Cell-Specific miRNAs Enables Gene Therapy of Globoid Cell Leukodystrophy

B. Gentner et al.

Hematopoietic stem cell-specific microRNAs regulate transgene expression in mice with a lysosomal storage disorder.

RESEARCH ARTICLE: Femtosecond Laser-Assisted Cataract Surgery with Integrated Optical Coherence Tomography

D. V. Palanker et al.

An image-guided, femtosecond laser creates accurate cuts in the eye to improve cataract surgery.

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Science Policy News and Analysis

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