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Science

Scaling Up Alternative Energy

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Scaling Up Alternative Energy

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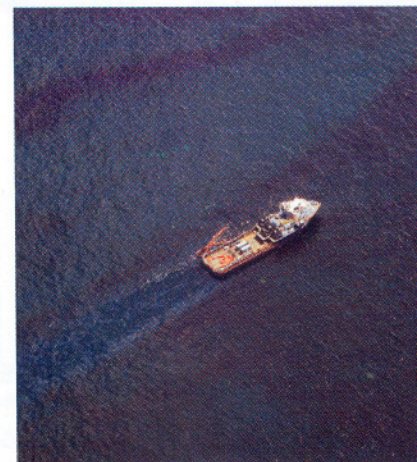
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Photo: Ashley Cooper/Visuals Unlimited, Inc.

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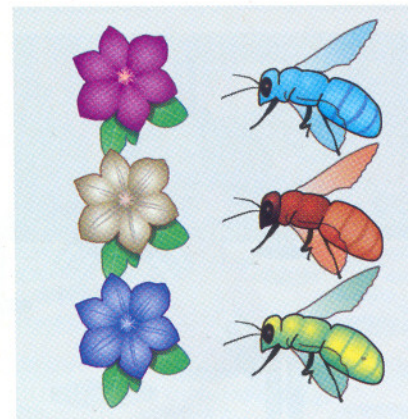
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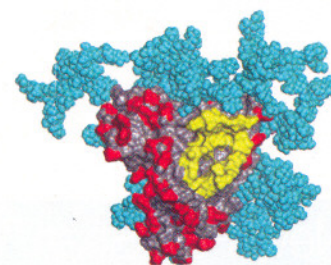
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10.1126/science.1189505

Histone H3 Thr-3 Phosphorylation by Haspin Positions Aurora B at Centromeres in Mitosis

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A critical regulator of cell division is recruited to chromosomes through the specific phosphorylation of a chromatin protein.

10.1126/science.1189435

Detection of a Trailing (L5) Neptune Trojan

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Pulsar Discovery by Global Volunteer Computing

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10.1126/science.1195253

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RESEARCH ARTICLE: The PI3K Isoforms p110 α and p110 δ Are Essential for Pre-B Cell Receptor Signaling and B Cell Development

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PERSPECTIVE: B Cell Receptor Signaling—Picky About PI3Ks

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Different isoforms of phosphatidylinositol 3-kinase have distinct roles in B cell receptor signaling.

PERSPECTIVE: Trafficking, Acidification, and Growth Factor Signaling

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Activation of Wnt and Notch pathways requires endocytosis of receptor complexes to an acidified vesicular compartment.

NETWATCH: GenBank, Gene Expression Omnibus (GEO), and Worldwide Protein Data Bank (wwPDB)

Deposit sequence, microarray, and structural data into public data banks; in Technical Information.

SCIENCE CAREERS

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Scientist's Work Bridges Math and Cancer

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Franziska Michor's research skills involve equations and computers, but her goal is clinical: to eliminate cancer.

Improving Science Through Animal Welfare

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First trained as a biology and geology teacher, Portuguese researcher Nuno Henrique Franco looks to improve science by improving animal welfare.

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COMMENTARY: Pharmacy Benefit Managers, Pharmacies, and Pharmacogenomic Testing—Prescription for Progress?

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As prescription drug costs rise, some companies are moving to promote pharmacogenomics-based testing to inform therapeutic choices.

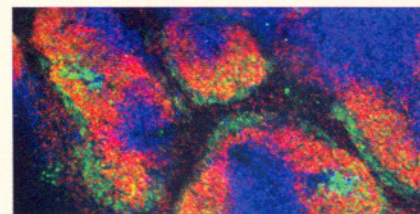
RESEARCH ARTICLE: Bacteria-Induced Gap Junctions in Tumors Favor Antigen Cross-Presentation and Antitumor Immunity

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PERSPECTIVE: Coupled for Cross-Presentation in Tumor Immunotherapy

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Bacterial infection-induced gap junctions in melanoma cells shuttle tumor antigens to immune cells and spur a successful antitumor immune response.



SCIENCE SIGNALING
Developing B cells.

RESEARCH ARTICLE: Fatty Acid Oxidation and Malonyl-CoA Decarboxylase in the Vascular Remodeling of Pulmonary Hypertension
G. Sutendra et al.

The overgrowth of vascular cells that causes pulmonary hypertension can be prevented by inhibiting a metabolic shift toward glycolysis.

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