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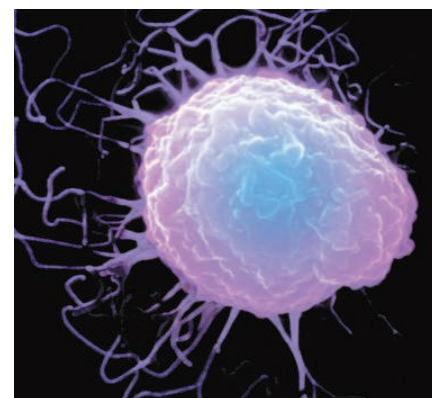
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Photo: Simon Rawles/Alamy



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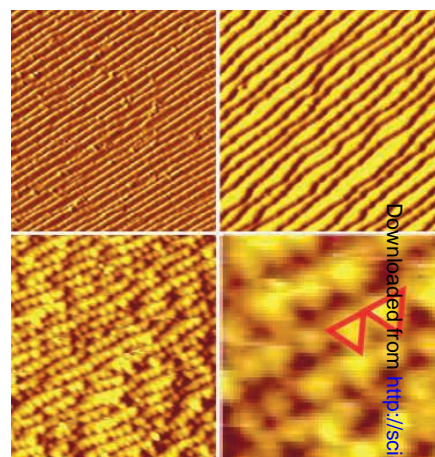
A bacterial signaling molecule induces
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Dark Matter Search Results from the CDMS II Experiment

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A Stratified Redox Model for the Ediacaran Ocean

C. Li et al.

Geological records in China indicate that ocean chemistry may explain the delay in life's biggest diversification period.
10.1126/science.1182369

Light-Controlled Self-Assembly of Semiconductor Nanoparticles into Twisted Ribbons

S. Srivastava et al.

The photooxidation of CdS nanoparticles within CdTe nanoparticle ribbons causes surface stresses that lead to twisting.
10.1126/science.1177218

Doc2b Is a High-Affinity Ca²⁺ Sensor for Spontaneous Neurotransmitter Release

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Spontaneous synaptic vesicle fusion is triggered by soluble proteins that compete with synaptotagmins to induce membrane curvature.
10.1126/science.1183765

Significant Acidification in Major Chinese Croplands

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10.1126/science.1182570
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Fixing the Legal Framework for Pharmaceutical Research

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10.1126/science.1184188

SCIENCE NOW

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Carbon dioxide emissions could be leading to record drought and snowfalls.

Can Thin Mountain Air Make You Slim?

High living—in the topographical sense—causes weight loss, a study suggests.

Better to React Than to Act

Legendary quantum physicist's speculations about Westerns inspire discovery about reaction speed.

SCIENCE SIGNALING

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RESEARCH ARTICLE: ARD1 Stabilization of TSC2 Suppresses Tumorigenesis Through the mTOR Signaling Pathway

H.-P. Kuo et al.

Acetylation by ARD1 of an inhibitor of mammalian target of rapamycin may inhibit cancer growth.

RESEARCH ARTICLE: SUMOylation Mediates the Nuclear Translocation and Signaling of the IGF-1 Receptor

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Attachment of SUMO lets insulin-like growth factor receptors act as transcriptional regulators in the nucleus.

PERSPECTIVE: Glucocorticoid Receptor DNA Binding Decoy Is a Gas

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By mimicking a DNA response element, a noncoding RNA inhibits glucocorticoid receptor activity.

SCIENCE CAREERS

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Free Career Resources for Scientists

Plant Geneticist Cultivating a Future for Peanut Farming in Uganda

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David Kalule Okello is one of Uganda's weapons in the battle against hunger.

Careers in Food Security Span Several Disciplines

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Feeding the planet is an urgent issue that needs scientists in many different fields.

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PERSPECTIVE: Genetic Polymorphisms—A Cornerstone of Translational Biobehavioral Research

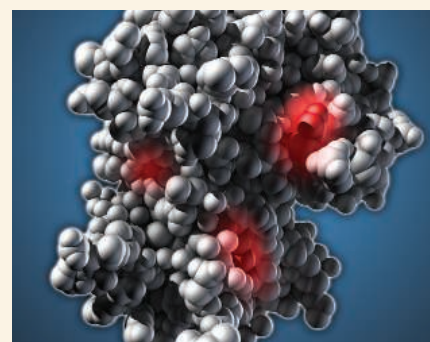
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Understanding common genetic variation can serve to explain individual behaviors.

COMMENTARY: Liberating Health Data for Clinical Research Applications

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Electronic health record systems represent important new strategies to improve health care.



SCIENCE SIGNALING

Sites of sumoylation on the IGF-1R.

RESEARCH ARTICLE: The Origins of Sexually Transmitted HIV Among Men Who Have Sex with Men

D. M. Butler et al.

A cell-free virus in semen is the origin of sexually transmitted HIV among men who have sex with men.

RESEARCH ARTICLE: A Monoclonal Antibody Against $\alpha V\beta 3$ Integrin Inhibits Development of Atherosclerotic Lesions in Diabetic Pigs

L. A. Maile et al.

An antibody directed at the C terminal of an integrin subunit can prevent atherosclerosis in diabetic pigs.

SCIENCE PODCAST

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Download the 12 February *Science* Podcast to hear about measuring food insecurity, rethinking agriculture for the 21st century, and reducing meat consumption.

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