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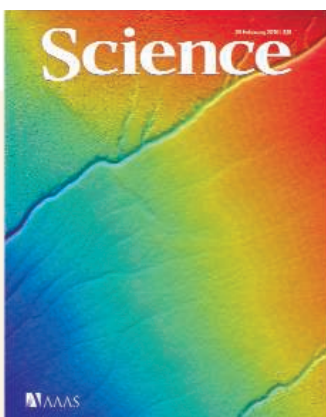


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COVER

High-resolution (0.25 meters per pixel) hillshade map showing the topography of the San Andreas Fault in the Carrizo Plain of California. Two stream channels that bend at the fault have been displaced about 10 meters (lower right) by two earthquakes and 16 meters (upper left) by as many as five earthquakes, including the most recent earthquake in 1857. Blue indicates lower elevations. See pages 1117 and 1119.

Image: O. Zielke, J. R. Arrowsmith/Arizona State University; L. Grant Ludwig, S. O. Akçiz, G. R. Noriega/University of California, Irvine; topography data gathered by the B4 Project and processed by OpenTopography

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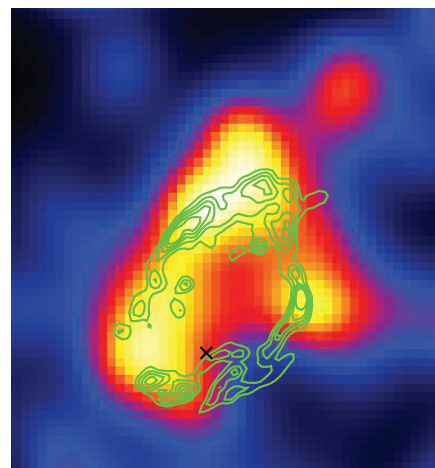
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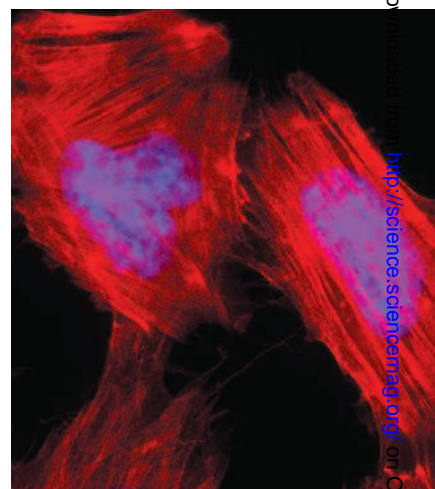
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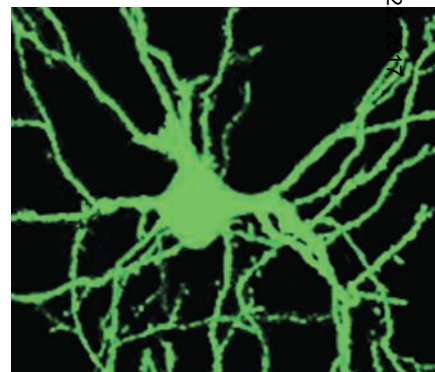
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CKAMP44: A Brain-Specific Protein Attenuating Short-Term Synaptic Plasticity in the Dentate Gyrus

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A synaptic protein that regulates postsynaptic AMPA receptor responses has been cloned and functionally characterized.
10.1126/science.1184178

β_2 -Adrenergic Receptor Redistribution in Heart Failure Changes cAMP Compartmentation

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A change in the distribution of a signaling molecule on the surface of heart muscle cells may contribute to heart failure.
10.1126/science.1185988

Unicellular Cyanobacterial Distributions Broaden the Oceanic N_2 Fixation Domain

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Nitrogen fixation in the South Pacific Ocean is partitioned among several microbe species with distinct ecophysiologicals.
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Patterns of Diversity in Marine Phytoplankton

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Highest diversity occurs in physically dynamic mid-latitude zones; lowest diversity and highest biomass occur toward the poles.
10.1126/science.1184961

Constraints on the Formation Age of Cometary Material from the NASA Stardust Mission

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Transport of inner solar system material to the Kuiper Belt and incorporation into comets took at least 2 million years.
10.1126/science.1184741

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Dolphin intelligence poses tricky scientific and ethical questions.

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RESEARCH ARTICLE: Apoptotic Cells Activate the "Phoenix Rising" Pathway to Promote Wound Healing and Tissue Regeneration

F. Li et al.

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RESEARCH ARTICLE: DNA-PKcs Controls an Endosomal Signaling Pathway for a Proinflammatory Response by Natural Killer Cells

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RESEARCH ARTICLE: Development of Personalized Tumor Biomarkers Using Massively Parallel Sequencing

R. J. Leary et al.

PERSPECTIVE: Cancer Sequencing Gets a Little More Personal

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Technology to detect personal genetic aberrations in cancer cells moves closer to the clinic.

RESEARCH ARTICLE: Adipocyte-Derived Factors Potentiate Nutrient-Induced Production of Plasminogen Activator Inhibitor-1 by Macrophages

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PERSPECTIVE: Adipose Tissue Macrophages—A Piece of the PAI of Metabolic Syndrome

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Macrophages within fat tissue release a hormone that contributes to atherosclerosis and insulin resistance.

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