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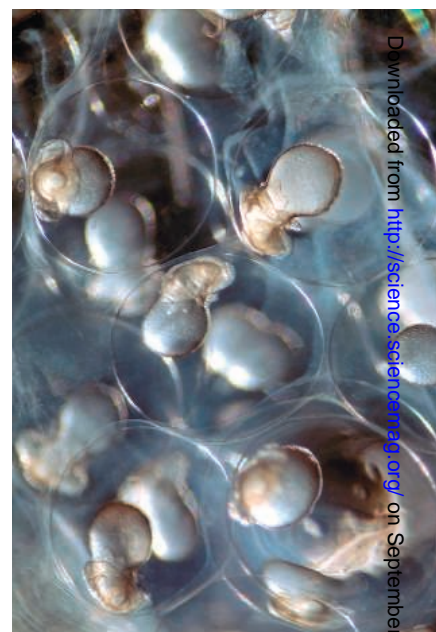
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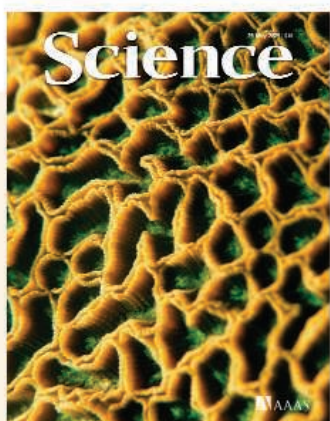


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COVER

A close-up of the tropical coral *Favia speciosa*. The position and age of related fossil corals have been used to constrain the timing of sea-level rise during the penultimate deglacial period. The timing of past sea-level change, relative to potential forcings, can help determine the mechanisms of climate change and the speed of ice sheet collapse. See page 1186.

Photo: Getty Images

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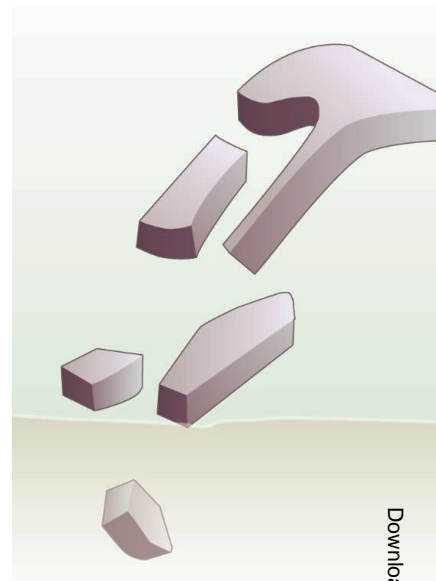
- 1165 Entropic Evidence for Linguistic Structure in the Indus Script
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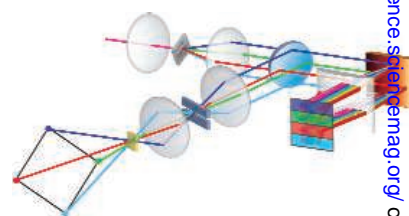
- 1166 Magnetic Field Sensing Beyond the Standard Quantum Limit Using 10-Spin NOON States
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- 1169 Two-Quantum 2D FT Electronic Spectroscopy of Biexcitons in GaAs Quantum Wells
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- 1173 Tearing of Stagnant Slab
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- 1183 Implications of Limiting CO₂ Concentrations for Land Use and Energy
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- 1190 Topographical and Temporal Diversity of the Human Skin Microbiome
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G. G. Gregoriou et al.
Synchrony in neuronal firing within a specific frequency range may regulate interactions between brain structures.
- 1210 Genome-Wide Identification of Human RNA Editing Sites by Parallel DNA Capturing and Sequencing
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Hundreds of new RNA editing sites are identified in the human genome.
- 1213 Unstable Tandem Repeats in Promoters Confer Transcriptional Evolvability
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Unstable repetitive DNA in the control regions of yeast genes modulates the evolution of chromatin structure and gene expression.

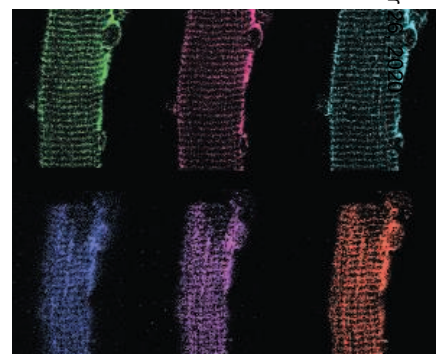
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Antigenic and Genetic Characteristics of Swine-Origin 2009 A(H1N1) Influenza Viruses Circulating in Humans

R. J. Garten et al.

Evolutionary analysis suggests a triple reassortant avian-to-pig origin for the 2009 influenza A(H1N1) outbreak.

10.1126/science.1176225

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Essential Role of the Glycosyltransferase Sxc/Ogt in Polycomb Repression

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10.1126/science.1169727

IL-21R on T Cells Is Critical for Sustained Functionality and Control of Chronic Viral Infection

A. Fröhlich et al.

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10.1126/science.1172815

Structure and Mechanism of an Amino Acid Antiporter

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The architecture of a membrane protein channel helps explain how *Escherichia coli* survive the acidic conditions of the stomach.

10.1126/science.1173654

Ventral Tegmental Area BDNF Induces an Opiate-Dependent-Like Reward State in Naïve Rats

H. Vargas-Perez et al.

A growth factor involved in neuronal plasticity alters neurons in a specific area of the brain after chronic exposure to opioid drugs.

10.1126/science.1168501

Venezuelan Science at Risk

C. Bifano

10.1126/science.1176733

TECHNICALCOMMENTS

Comment on "A Large Excess in Apparent Solar Oblateness Due to Surface Magnetism"

J. R. Kuhn et al.

full text at www.sciencemag.org/cgi/content/full/324/5931/1143-b

Response to Comment on "A Large Excess in Apparent Solar Oblateness Due to Surface Magnetism"

M. D. Fivian et al.

full text at www.sciencemag.org/cgi/content/full/324/5931/1143-c

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Biochemical signals from tumors cause anxiety and depression in rats.

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The Signal Transduction Knowledge Environment

EDITORIAL GUIDE: "Omic" Risk Assessment

M. B. Major and R. T. Moon

Integration of multiple data sets is the key to hit validation.

RESEARCH ARTICLE: System-Wide Changes to SUMO Modifications in Response to Heat Shock

F. Golebiowski et al.

SUMO is redistributed among many targets to mediate both short- and long-term signaling events.

RESEARCH ARTICLE: Bruton's Tyrosine Kinase Revealed as a Negative Regulator of Wnt-β-Catenin Signaling

R. G. James et al.

Combining an siRNA screen with a small-molecule screen reveals a negative pathway regulator.

REVIEW: CD36, a Scavenger Receptor Involved in Immunity, Metabolism, Angiogenesis, and Behavior

R. L. Silverstein and M. Febbraio

Signaling by CD36 is ligand and cell specific and is implicated in multiple human diseases.

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R. Ley

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>> *News story p. 1136*

A Tale of Two Pathologists

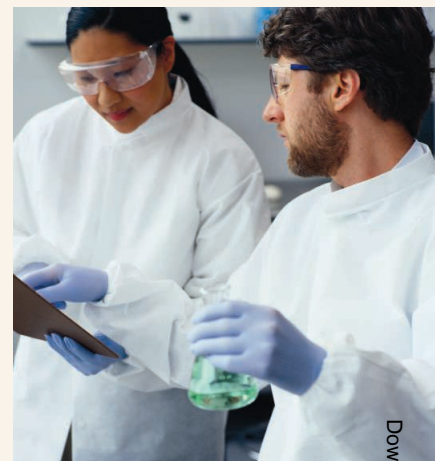
A. Sasso

Terrill Topps and Dorkina Myrick have two careers, three doctoral degrees, and one life together.

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E. Pain

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