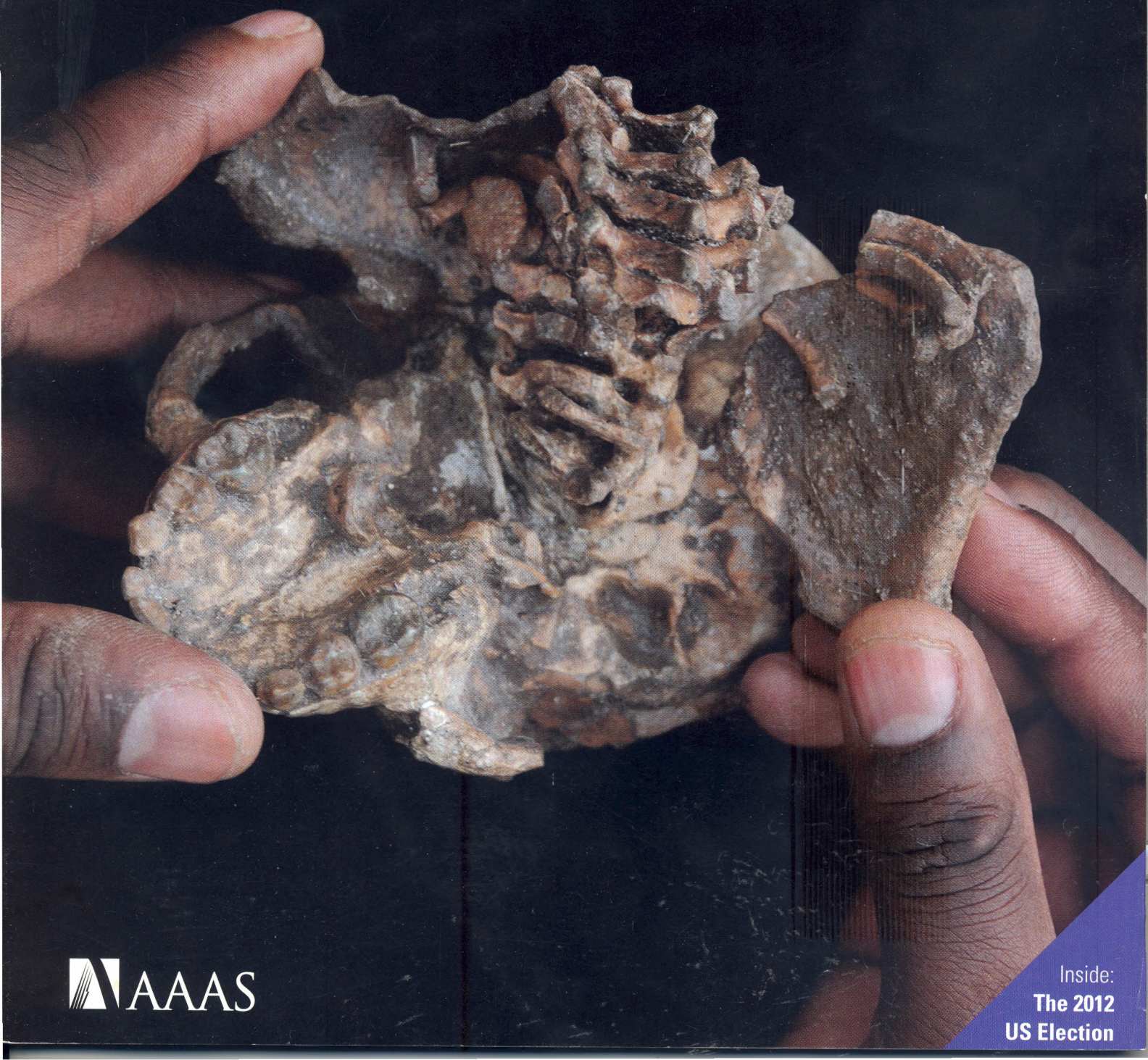


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 AAAS

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Skull and shoulders of "Selam"—a 3.3-million-year-old female child *Australopithecus afarensis* from Dikika, Ethiopia. The upside-down view reveals her palate, vertebral column, and both shoulder blades (in this orientation, the scapula on the right measures 60 millimeters across). The scapulae were recently freed from their sandstone matrix and are described in the Report on page 514. The scapulae display several apelike characteristics, implying that *A. afarensis* was still a capable climber.

Image: Zeresenay Alemseged/Dikika Research Project

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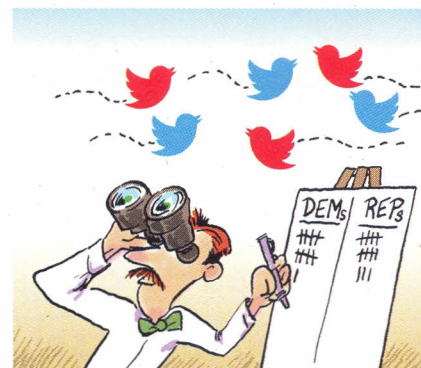
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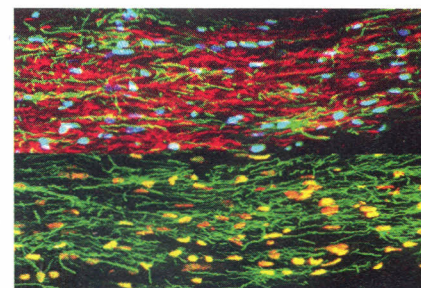
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A Global Pattern of Thermal Adaptation in Marine Phytoplankton
M. K. Thomas et al.
10.1126/science.1224836

Akt-Mediated Regulation of Autophagy and Tumorigenesis Through Beclin 1 Phosphorylation
R. C. Wang et al.
10.1126/science.1225967

The *Legionella* Effector RavZ Inhibits Host Autophagy Through Irreversible Atg8 Deconjugation
A. Choy et al.
10.1126/science.1227026

A Bipolar Spindle of Antiparallel ParM Filaments Drives Bacterial Plasmid Segregation
P. Gayathri et al.
10.1126/science.1229091

Binary Millisecond Pulsar Discovery via Gamma-Ray Pulsations
H. J. Pletsch et al.
10.1126/science.1229054

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Comment and Response on "Conspecific Negative Density Dependence and Forest Diversity"
Comment: I. A. Dickie et al.
<http://dx.doi.org/10.1126/science.1225520>
Response: D. J. Johnson et al.
<http://dx.doi.org/10.1126/science.1225996>

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A new study supports the idea that cooking helped human ancestors expand their minds.
http://scim.ag/Big_Brains

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A temple erected by a Roman emperor is among the earliest evidence of orchids in Western art.
http://scim.ag/Evidence_Orchids

Antibiotic-Resistant Bugs Go Wild
Researchers find deadly hospital bacterium in rabbits and a migratory shorebird.
<http://scim.ag/Hospital-Bacterium>

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RESEARCH ARTICLE: Akt Phosphorylates the Transcriptional Repressor Bmi1 to Block Its Effects on the Tumor Suppressing *Ink4a-Arf* Locus
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PRESENTATION: The Effects of Acute and Chronic Stress on Diabetes Control
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PRESENTATION: P450 Oxidoreductase Deficiency—A Disorder of Steroidogenesis with Multiple Clinical Manifestations
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SCIENCE TRANSLATIONAL MEDICINE

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Integrating Medicine and Science
24 October issue: <http://scim.ag/ss102412>

RESEARCH ARTICLE: NADPH Oxidase Inhibits the Pathogenesis of Systemic Lupus Erythematosus
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Neutrophil NETs are not required for SLE development in a mouse model.

RESEARCH ARTICLE: Targeting Cancer with a Lupus Autoantibody
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FOCUS: Lupus Antibody Tops Cancer Cells

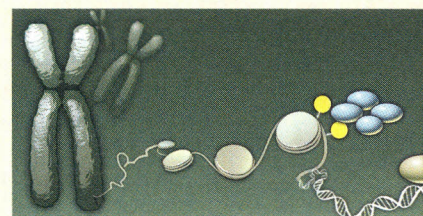
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A cell-penetrating lupus anti-DNA antibody inhibits DNA repair and is toxic to cancer cells.

RESEARCH ARTICLE: Quantitative Image Analysis of Cellular Heterogeneity in Breast Tumors Complements Genomic Profiling
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Quantitative image analysis of breast tumors contributes to a predictor of survival.

FOCUS: Building a Life Sciences Innovation Ecosystem

K. D. Harrison et al.
Universities should support research with commercial potential.



SCIENCE SIGNALING
Silencing a transcriptional silencer.

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Free Career Resources for Scientists
<http://scim.ag/SciCareers26October2012>

Experimental Error: A Cure for Listlessness

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Teaching Postdocs to Be Professors

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Life at the Bottleneck

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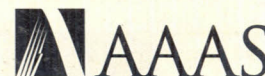
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