

EDITORIAL

- 1323 Science Meets Farming in Africa
Calestous Juma

NEWS OF THE WEEK

- 1328 A roundup of the week's top stories

NEWS & ANALYSIS

- 1331 Is €80 Billion on the Horizon for European Research?
Robert-Jan Smits: On Tearing Down Silos, Horizon 2020's Chances, and Solving His 'Headache'
>> *Science Podcast*
- 1333 Weed-Out Courses Hamper Diversity
- 1334 First Solid Signs of the Higgs Boson Could Be Announced Next Week
- 1335 Genes Confirm Europeans' Blow to Native Americans
- 1336 Critics Question China's Indigenous Innovation Effort
- 1337 Congress Asks NOAA to Consider Charging for Data

NEWS FOCUS

- 1338 Halting HIV/AIDS Epidemics
- 1341 Tohoku Inundation Spurs Hunt for Ancient Tsunamis
Did Tsunamis Influence Polynesian History?
- 1344 Saudi Universities Offer Cash in Exchange for Academic Prestige

LETTERS

- 1346 Rethinking Clinical Trials: Phase 1 Studies Insufficient
M. Carome and S. Wolfe
- Rethinking Clinical Trials: Change Is Coming
N. A. Marcus
- Rethinking Clinical Trials: Biology's Mysteries
D. W. Borhani and J. A. Butts

Primitive Ladder-of-Life Thinking Has Evolved

U. Kutschera

Response

J. L. Acuña et al.

- 1348 CORRECTIONS AND CLARIFICATIONS

BOOKS ET AL.

- 1349 The Sibling Effect
J. Kluger, reviewed by N. L. Segal
- 1350 Solar Decathlon 2011
R. King, Director

POLICY FORUM

- 1351 Entertainment Value: Should the Media Pay for Nature Conservation?
P. Jepson et al.

PERSPECTIVES

- 1353 The Cost of Fear
T. E. Martin
>> *Report p. 1398*
- 1354 Beleaguered Immunity
J. M. McDowell
>> *Reports pp. 1401 and 1405*
- 1355 Optimizing Perovskites for the Water-Splitting Reaction
A. Vojvodic and J. K. Nørskov
>> *Report p. 1383*
- 1356 Can Integration Tame Conflicts?
L. Goette and S. Meier
>> *Report p. 1392*
- 1358 Empathy and the Laws of Affect
J. Panksepp
>> *Report p. 1427*
- 1359 Complex Colloidal Assembly
W. J. Parak
>> *Report p. 1377*
- 1360 Using the Past to Predict the Future?
G. C. Hegerl and T. Russon
>> *Report p. 1385*

ASSOCIATION AFFAIRS

- 1362 Presidential Address: Passions
A. S. Huang

CONTENTS continued >>



page 1341



page 1350



COVER

Scanning electron micrograph of a female *Anopheles stephensi* mosquito, a transmitter of malaria (proboscis length: ~0.6 millimeters). To drive malaria eradication, new medicines that target all stages of the malaria life cycle are needed. In their study, Meister *et al.* used thousands of *A. stephensi* mosquitos to identify chemical classes with activity against the silent malaria liver stage. See page 1372.

Image: David Scharf/Getty Images

DEPARTMENTS

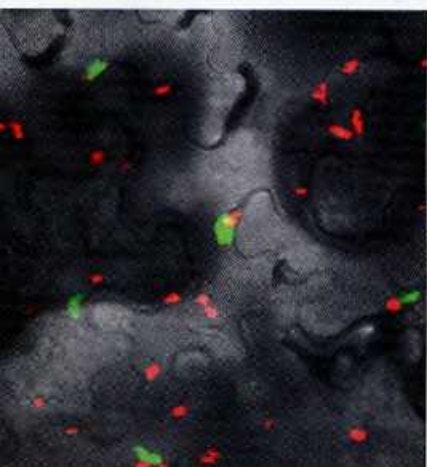
- 1321 This Week in Science
1324 Editors' Choice
1326 Science Staff
1432 New Products
1433 Science Careers



page 1367



pages 1356 & 1392



pages 1354, 1401, & 1405

RESEARCH ARTICLES

- 1367** **Calibrating the End-Permian Mass Extinction**
S. Shen et al.
High-precision geochronologic dating constrains probable causes of Earth's largest mass extinction.
- 1372** **Imaging of *Plasmodium* Liver Stages to Drive Next-Generation Antimalarial Drug Discovery**
S. Meister et al.
Imidazolopiperazine compounds inhibit liver-stage malaria parasites with one oral dose in mice.

REPORTS

- 1377** **Carving at the Nanoscale: Sequential Galvanic Exchange and Kirkendall Growth at Room Temperature**
E. González et al.
Processes used in colloidal chemistry can be jointly exploited to make complex metal alloy nanoparticles.
>> *Perspective p. 1359*
- 1380** **The Origin of OB Runaway Stars**
M. S. Fujii and S. Portegies Zwart
Most of the unusually fast, young stars in our galaxy are produced in three-body encounters within dense clusters of stars.
- 1383** **A Perovskite Oxide Optimized for Oxygen Evolution Catalysis from Molecular Orbital Principles**
J. Suntivich et al.
An electronic property of metal oxides was used to guide development of a catalyst for prospective use in energy applications.
>> *Perspective p. 1355*
- 1385** **Climate Sensitivity Estimated from Temperature Reconstructions of the Last Glacial Maximum**
A. Schmittner et al.
Last Glacial Maximum temperature reconstructions and model simulations can constrain the equilibrium climate sensitivity.
>> *Perspective p. 1360*
- 1388** **Middle Stone Age Bedding Construction and Settlement Patterns in Sibudu, South Africa**
L. Wadley et al.
Early humans constructed sleeping mats from local plants, including some with insecticidal properties.
- 1392** **Context Modularity of Human Altruism**
M. Alexander and F. Christia
Ethnic integration enhances cooperative behavior and sanctioning of free-riders.
>> *Perspective p. 1356*
- 1394** **Capacity Building Helps Pastoral Women Transform Impoverished Communities in Ethiopia**
D. L. Coppock et al.
Diversification of income-producing activities provides greater resilience to drought.

- 1398** **Perceived Predation Risk Reduces the Number of Offspring Songbirds Produce per Year**
L. Y. Zanette et al.
Fear itself reduces reproductive success in song sparrows.
>> *Perspective p. 1353*
- 1401** ***Arabidopsis* EDS1 Connects Pathogen Effector Recognition to Cell Compartment-Specific Immune Responses**
K. Heidrich et al.
- 1405** **Pathogen Effectors Target *Arabidopsis* EDS1 and Alter Its Interactions with Immune Regulators**
S. Bhattacharjee et al.
Coordination of different defense pathways across cell compartments produces a fully effective innate immune response.
>> *Perspective p. 1354*
- 1408** **The Competitive Advantage of a Dual-Transporter System**
S. Levy et al.
Low-affinity nutrient transporters sense depletion earlier than high-affinity transporters, thus preparing cells for starvation.
- 1413** **Perceptual Learning Incepted by Decoded fMRI Neurofeedback Without Stimulus Presentation**
K. Shibata et al.
Even the adult primary visual cortex is sufficiently plastic to allow performance enhancement.
- 1415** **Entorhinal Cortex Layer III Input to the Hippocampus Is Crucial for Temporal Association Memory**
J. Suh et al.
A specific neural circuit integrates temporally dispersed stimuli into a coherent memory episode.
- 1420** **Interconversion Between Intestinal Stem Cell Populations in Distinct Niches**
N. Takeda et al.
Two niches with distinct characteristics work in tandem.
- 1424** **Explaining Seasonal Fluctuations of Measles in Niger Using Nighttime Lights Imagery**
N. Bharti et al.
Changes in human population density as measured by satellite images of nighttime lights predict measles.
>> *Science Podcast*
- 1427** **Empathy and Pro-Social Behavior in Rats**
I. Ben-Ami Bartal et al.
Rats free companions from restraint, apparently motivated by empathy to end their mate's distress.
>> *Perspective p. 1358*

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