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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 mosquitoes to identify chemical classes with activity against the silent malaria liver stage. See page 1372.

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S. Meister et al.
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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.

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.

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.

1388 Middle Stone Age Bedding Construction and Settlement Patterns at Sibudu, South Africa
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Early humans constructed sleeping mats from local plants, including some with insecticidal properties.

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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.

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.

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K. Shibata et al.
Even the adult primary visual cortex is sufficiently plastic to allow performance enhancement.

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A specific neural circuit integrates temporally dispersed stimuli into a coherent memory episode.

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Changes in human population density as measured by satellite images of nighttime lights predict measles.

1427 Empathy and Pro-Social Behavior in Rats
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Rats free companions from restraint, apparently motivated by empathy to end their mate’s distress.

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Stop Signals Provide Cross Inhibition in Collective Decision-Making by Honeybee Swarms
T. D. Seeley et al.
Scout bees bring about nest-site decisions by targeting stop signals at bees with other candidate sites.
10.1126/science.1210361
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How Honeybees Break a Decision-Making Deadlock
J. E. Niven
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A SUMOylation-Dependent Transcriptional Subprogram Is Required for Myc-Driven Tumorigenesis
J. D. Kessler et al.
An RNA interference screen identifies a "druggable" enzyme whose inhibition halts tumor cell growth.
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M. A. D肘Wit et al.
The molecular motor dynnein moves each of its two heads independently along the microtubule.
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L.-Q. Chen et al.
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Capturing Ultrasound EMT Zeolite from Template-Free Systems
E.-P. Ng et al.
Control of the early stages of nucleation favors the synthesis of large-pore zeolite crystals ~10 nanometers in size.
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R. A. Williams et al.
A pair of lasers is used to produce complex interactions between bosons in an ultracold gas.
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Genetically engineered bacteria could turn trees, grasses, and agricultural waste into gasoline.
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M. B. Yaffe
Computational biology studies are complex; papers describing the results should not be.

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K. Demhardt et al.
Whereas nerve growth factor promotes neurite outgrowth, the precursor form triggers retraction.

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B. A. Liu et al.
The evolution of modular protein domains corresponds with organismal complexity.

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G. Fu et al.
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T. Tanaka et al.
An E3 ubiquitin ligase inhibits the development of inflammatory T cells involved in autoimmune diseases.

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FOCUS: Three Rs of Animal Testing for Regenerative Medicine Products
R. Robinson
Considerations of animal welfare have spurred the design of "smarter" preclinical studies intended to ultimately benefit patients.

FOCUS: ROCK in a Stiff Place
D. A. Louffenger

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J. Huynh et al.
Inhibiting endothelial cell contractility reverses the deleterious effects of age-related matrix stiffening on normal cell function.

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A Pharma Industry in Crisis
E. Pain
Scientists seeking pharma careers must adapt to sweeping changes in the industry.
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Future Pharma Scientists: Start Small
M. Price
As the industry moves away from the big-pharma model, young drug-development scientists are likely to find more and better opportunities at smaller companies.
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K. B. Patterson et al.
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