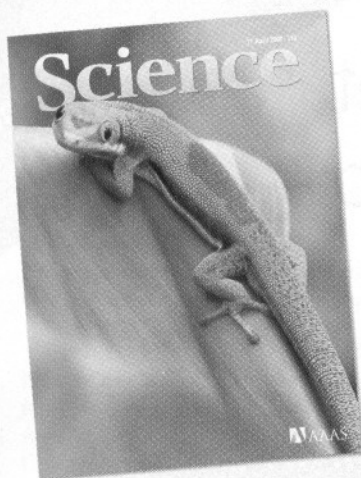




## COVER

A lined day gecko (*Phelsuma lineata*) from Andasibe, eastern Madagascar. This gecko is one of the 2315 species analyzed to identify optimal expansion sites for protected areas within Madagascar, as described on page 222.

Photo: Miroslav Honzák

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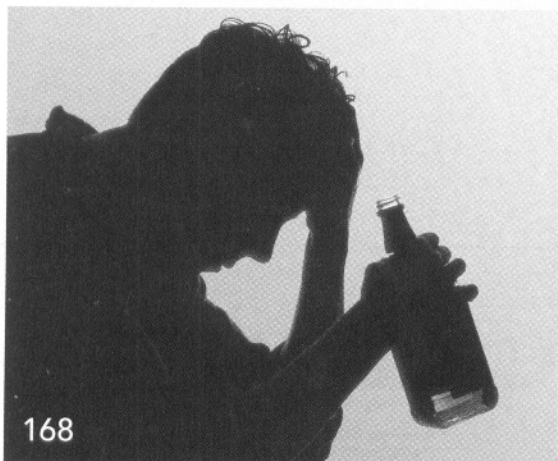
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## SCIENCE EXPRESS

www.scienceexpress.org

### MOLECULAR BIOLOGY

Endogenous siRNAs Derived from Transposons and mRNAs in *Drosophila* Somatic Cells

M. Ghildiyal et al.

Endogenous small interfering RNAs transcribed from both transposons and messenger RNAs are found in somatic cells of flies and may act to silence "selfish" genetic elements.

10.1126/science.1157396

### IMMUNOLOGY

Innate Immune Activation Through Nalp3 Inflammasome Sensing of Asbestos and Silica

C. Dostert et al.

A large multiprotein complex detects particulate airborne pollutants that have been taken up by immune cells in the lung and initiates a potent inflammatory response.

10.1126/science.1156995

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### APPLIED PHYSICS

Magnetic Domain-Wall Racetrack Memory

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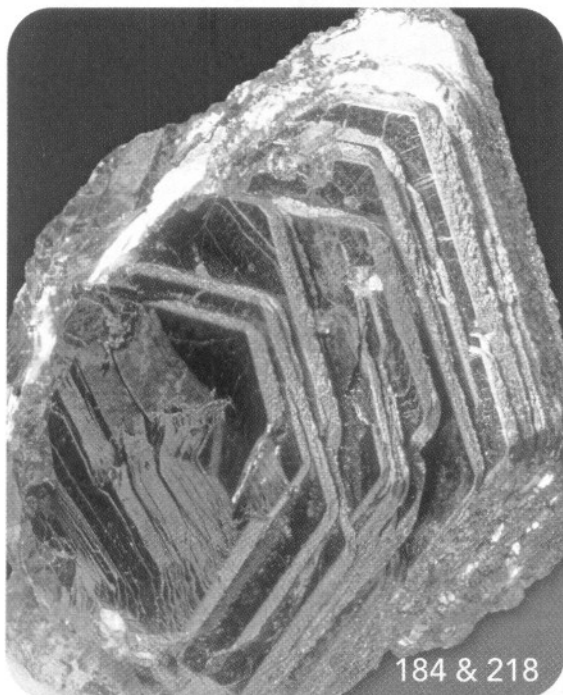
### PALEOCLIMATE

Amplification of Cretaceous Warmth by Biological Cloud Feedbacks

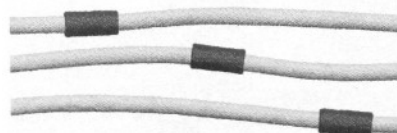
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The extreme warmth of the Cretaceous may have been a consequence of fewer clouds, caused by a low abundance of organic cloud nuclei from reduced ocean productivity.



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Subnanometer Motion of Cargoes Driven by Thermal Gradients Along Carbon Nanotubes

A. Barreiro et al.

A segment of the outer shell of a multiwall carbon nanotube can move back and forth in response to a thermal gradient created by electrical current passing through the nanotube.

10.1126/science.1155559

### NEUROSCIENCE

Temperature Sensing by an Olfactory Neuron in a Circuit Controlling Behavior of *C. elegans*

A. Kuhara et al.

An olfactory neuron in *Caenorhabditis elegans* also senses the ambient temperature and is necessary for worms' propensity to seek out the temperature at which they were raised.

10.1126/science.1148922

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A. N. Pasupathy et al.

Scanning tunneling microscope measurements around the superconducting transition temperature imply that electron correlations, not a proposed boson glue, pair up electrons.

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Current-Controlled Magnetic Domain-Wall Nanowire Shift Register

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M. Hayashi, L. Thomas, R. Moriya, C. Rettner, S. S. P. Parkin

Brief, polarized current pulses can create and shift magnetic domain walls along a magnetic nanowire, demonstrating the basis for a racetrack memory. >> *News story p. 166*

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B. F. Chao, Y. H. Wu, Y. S. Li

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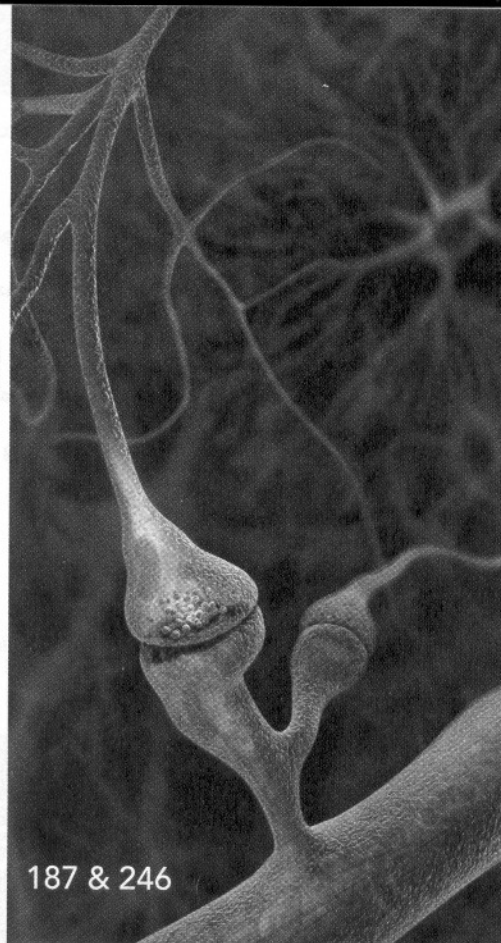
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