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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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

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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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S. S. P. Parkin, M. Hayashi, L. Thomas

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Amplification of Cretaceous Warmth by Biological Cloud Feedbacks
L. R. Kump and D. Pollard
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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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
M. Hayashi, L. Thomas, R. Moriya, C. Rettner, S. S. P. Parkin
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A broad analysis of many taxa throughout Madagascar identifies regions where conservation is likely to protect the most species.

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A cellular enzyme that defends against infection by causing mutations in retroviruses can also mutate the genome of a DNA virus associated with benign and precancerous cells.

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A survey of two related human pathogens shows that they are merging, probably as a result of their proximity in a new ecological niche—the intestines of farmed animals.

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V. Westphal et al.
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S. Webb
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