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Plundering the coffers of cash-strapped organizations is not good for science



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Kay Davies

It's not just science that would be affected — animals would suffer too

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Guppy female preferences for male colours depend on the lighting
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Antibodies regulate antitumour immunity

B cells can both trigger and suppress tumour-specific CD8⁺ T cells
Laurence Zitvogel & Guido Kroemer
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Nanoscale connections for brain-like circuits

Artificial synapses formed from memristor devices
Robert Legenstein
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Tasteless pesticides affect bees in the field

Accumulating evidence of the negative effects of neonicotinoids
Nigel E Raine & Richard J Gill
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Dinosaur up in the air

A Chinese scansoriopterygid that may have flown
Kevin Padian [SEE LETTER P.70](#)

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Organic polymers form fuel from water

A tunable class of photocatalyst for splitting water into hydrogen
Vijay S Vyas & Bettina V Lotsch

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J Drost et al.

- 48 **STRUCTURAL BIOLOGY** Structural basis for Na⁺ transport mechanism by a light-driven Na⁺ pump
H E Kato et al.



ON THE COVER

Curtains for jets?

Simulated curtain eruptions overlain on Cassini image N1637461416 adapted to make erupted material visible. The Cassini probe detected large fractures bounded by rifts near the south pole of Saturn's moon Enceladus. These 'tiger stripe' features were found to be the sources of the observed jets of water vapour. Now it is shown that much of the eruptive activity can be explained by broad, curtain-like eruptions, many of which may have been misinterpreted previously as discrete jets. [PAGE 57](#)

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A Zanella et al.
- 57 **PLANETARY SCIENCE** Curtain eruptions from Enceladus' south-polar terrain
J N Spitale, T A Hurford, A R Rhoden, E E Berkson & S S Platts
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M Prezioso et al. [SEE N&V P.37](#)
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M H Alford et al.
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X Xu et al. [SEE N&V P.40](#)
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S C Kessler et al. [SEE N&V P.38](#)

- 77 **AGROECOLOGY** Seed coating with a neonicotinoid insecticide negatively affects wild bees

M Rundlöf et al. [SEE N&V P.38](#)

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F Supek & B Lehner

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C Moon et al.

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K Haslinger, M Peschke, C Brieke, E Maximowitsch & M J Cryle

- 110 **RETRACTION** Histone methylation by the *Drosophila* epigenetic transcriptional regulator Ash1
C Beisel, A Imhof, J Greene, E Kremmer & F Sauer

PALAEOLOGY

Glide path

Tiny dinosaur *Yi qi* may have had a wrist for heights. [PAGE 70](#)

