



COVER

Male flowers of *Gurania makoyana*, a Central American plant in the cucumber family, harbor larvae (not visible) of two species of fly; a third fly species infests female flowers of the same species of plant. Some plant species in this family can host as many as 13 different fly species. See page 928.

Photo: Marty Condon

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www.scienceexpress.org

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Activation of the Cellular DNA Damage Response in the Absence of DNA Lesions

E. Soutoglou and T. Misteli

Protein complexes that usually assemble on and repair damaged DNA can form at undamaged sites to halt the cell cycle if several of the proteins are first tethered there.

10.1126/science.1159051

ASTRONOMY

An Eccentric Binary Millisecond Pulsar in the Galactic Plane

D. J. Champion et al.

A rapidly rotating pulsar has a highly eccentric orbit about its companion star, not the usual circular orbit, challenging ideas on how such binary systems form.

>> *Science Express Perspective by E. P. J. van den Heuvel*

10.1126/science.1157580

PERSPECTIVE: An Eccentric Pulsar: Result of a Threesome?

E. P. J. van den Heuvel

>> *Science Express Research Article by D. J. Champion et al.*

10.1126/science.1158738



MOLECULAR BIOLOGY

Widespread Translational Inhibition by Plant miRNAs and siRNAs

P. Brodersen et al.

Plant microRNAs and small interfering RNAs, thought to inhibit gene expression by cleavage of their RNA targets, also interfere with the translation of these RNAs into protein.

10.1126/science.1159151

PLANETARY SCIENCE

Mars North Polar Deposits: Stratigraphy, Age, and Geodynamical Response

R. J. Phillips et al.

Radar mapping shows that Mars' thick north polar ice cap contains four dust-rich layers recording variation in the planet's orbit and only slightly depresses the underlying crust.

>> *News story p. 867*

10.1126/science.1157546

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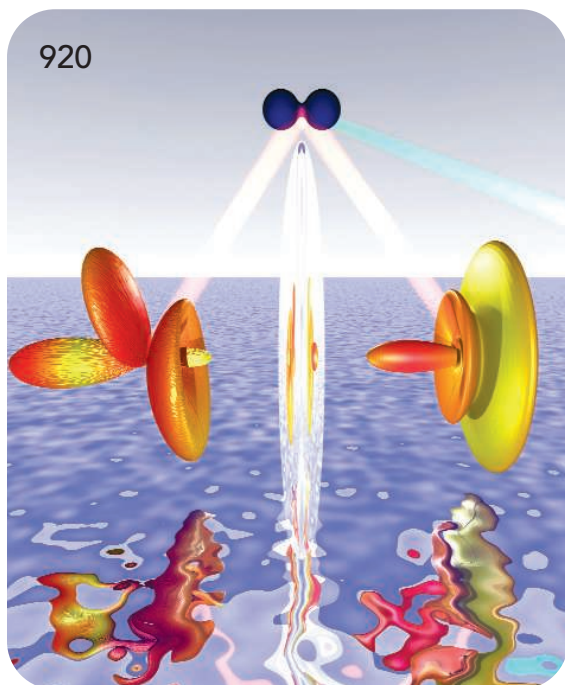
D. C. Cannatella

full text at www.sciencemag.org/cgi/content/full/320/5878/874c

Response to Comment on "Habitat Split and the Global Decline of Amphibians"

C. R. Fonseca, C. G. Becker, C. F. B. Haddad, P. I. Prado

full text at www.sciencemag.org/cgi/content/full/320/5878/874d



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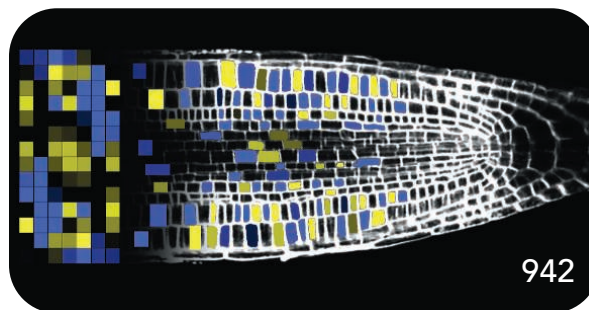
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>> *Perspective p. 879*

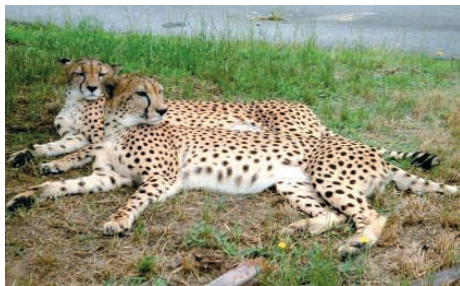


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Captive cheetahs are being besieged.

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Researchers are closing in on how a version of mad cow disease is decimating captive cheetah populations.

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A. Sasso

Many African American freshmen hope to become science majors, but their numbers decline in subsequent years.

MiSciNet: Betty Mbom

A. Sasso

As an undergraduate, Stanford-bound Betty Mbom started a minority mentoring program at her university.

Coming to Europe

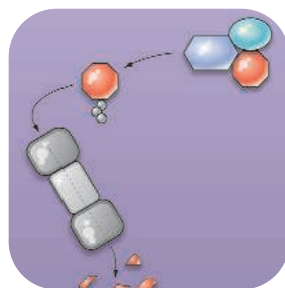
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New policies aim to improve international scientists' mobility into and within Europe.

Science Careers Podcast: European Visa Issues

K. Travis

A European policy official talks about coming to Europe to do science.



FAK targets p53 for degradation.

SCIENCE SIGNALING

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PERSPECTIVE: Focal Adhesion Kinase Versus p53—Apoptosis or Survival?

W. G. Cance and V. M. Golubovskaya

Focal adhesion kinase acts as a scaffold protein to target p53 for degradation in the nucleus, leading to cell proliferation.

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GLOSSARY

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