Volume 320, Issue 5878

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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864

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SCIENCE EXPRESS

www.sciencexpress.org

MOLECULAR BIOLOGY

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.

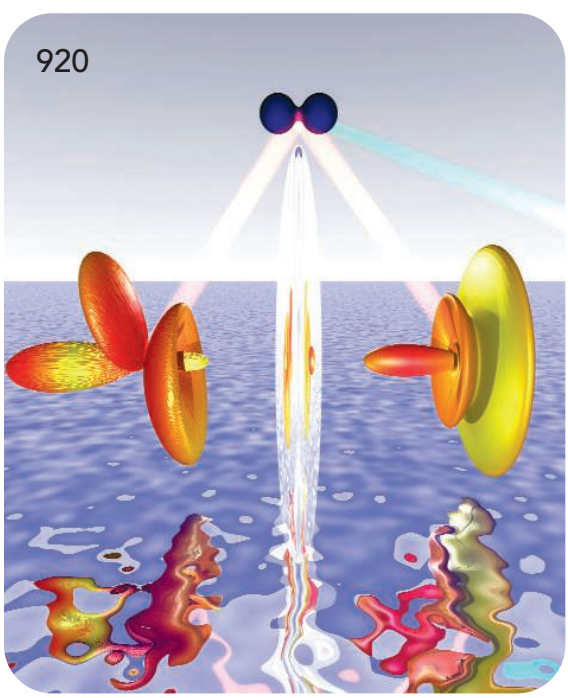
Radar mapping shows that Mars' thick north polar ice cap contains four dust-rich layers recording variation in the planet's orbit and only slightly depresses the underlying crust.

>> News story p. 867

10.1126/science.1157546

TECHNICAL COMMENT ABSTRACTS

ECOLOGY



CREDIT (BOTTOM): MARKUS S. SCHÖFFLER

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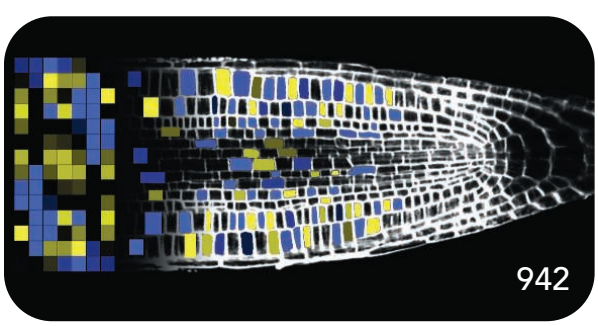

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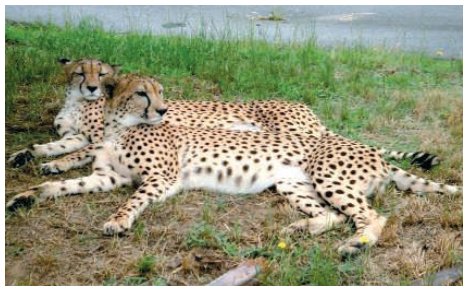

Captive cheetahs are being besieged.

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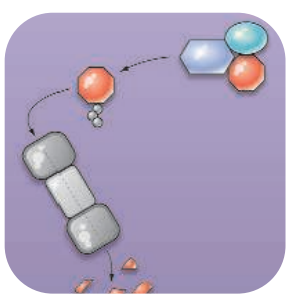
HIGHLIGHTS FROM OUR DAILY NEWS COVERAGE

The Mystery of the Dying Cheetahs
Researchers are closing in on how a version of mad cow disease is decimating captive cheetah populations.

Taking the Young Universe's Temperature
Gas molecules from across the cosmos help to underpin the big bang.

Blame It on the Beetles
Voracious insects ruined a whole lot of dinosaur fossils.



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.

ST NETWATCH: Technical Information
Read entries in a new section that features online information about experimental design, methods, reagents, and data analysis.

GLOSSARY
Find out what BDNF, NICD, and PARL mean in the world of cell signaling.

Maintaining an interest in science.

SCIENCE **CAREERS**

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MiSciNet: African Americans in the Scientific Workforce
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
A. Swarup
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.

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