



COVER

Honey bees (*Apis mellifera*), here shown on a honeycomb, form complex societies and interact with one another by means of stereotyped social behaviors. A special section beginning on page 891 explores what genetic approaches have taught us about behavior in bees and other species, including humans.

Image: Don Farrall, Getty Images

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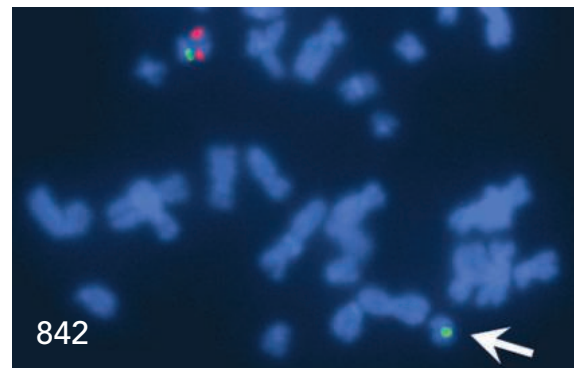
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www.sciencexpress.org

MOLECULAR BIOLOGY

The *Air* Noncoding RNA Epigenetically Silences Transcription by Targeting G9a to Chromatin

T. Nagano et al.

Air, a large noncoding RNA, interacts with chromatin at a particular promoter, recruiting a histone methyltransferase to silence gene expression in an allele-specific manner.

10.1126/science.1163802

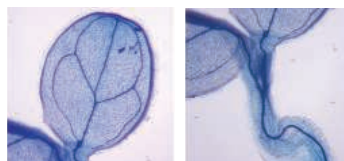
PLANETARY SCIENCE

Long-Lived Volcanism on the Lunar Farside Revealed by SELENE Terrain Camera

J. Haruyama et al.

Images of the Moon by the SELENE spacecraft and revised dates of lava flows by crater counts imply that episodic volcanism on the farside lasted to 2.5 billion years ago.

10.1126/science.1163382



MOLECULAR BIOLOGY

Photoexcited CRY2 Interacts with CIB1 to Regulate Transcription and Floral Initiation in *Arabidopsis*

H. Liu, X. Yu, K. Li, J. Klejnot, H. Yang, D. Lisiero, C. Lin

Blue light triggers the association of a photoreceptor, transcription factor, and DNA site, thus inducing expression of the gene *FT* (flowering time) and initiating flowering.

10.1126/science.1163927

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full text at www.sciencemag.org/cgi/content/full/322/5903/857a

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Laboratory Plasticware

G. R. McDonald et al.

A lipid molecule and a quaternary ammonium biocide that are used in making plastic labware can contaminate common enzyme and binding assays, altering the results.

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Global Protein Stability Profiling in Mammalian Cells 918

H.-C. S. Yen, Q. Xu, D. M. Chou, Z. Zhao, S. J. Elledge

Identification of SCF Ubiquitin Ligase Substrates by 923

Global Protein Stability Profiling

H.-C. S. Yen and S. J. Elledge

A method that determines the half lives of all cellular proteins has been used to identify targets of a ubiquitin ligase, which controls the cell cycle through protein degradation. >> *Perspective* p. 872

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M. Stadtfeld et al.

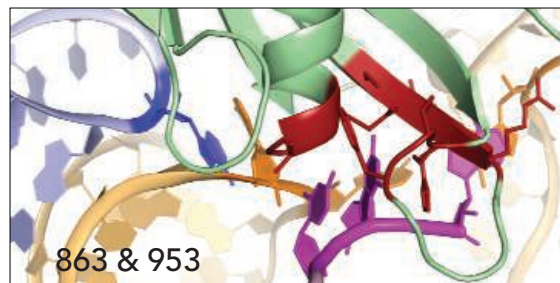
Transient exposure of mouse fibroblast and liver cells to adenovirus vectors carrying factors that induce pluripotency generates stem cells without viral elements in the genome.

DEVELOPMENTAL BIOLOGY

Generation of Mouse Induced Pluripotent Stem Cells Without Viral Vectors 949

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Distinct patterns of activity elicited in auditory cortex by different vowels and different speakers allows independent identification of who is speaking and what they are saying.



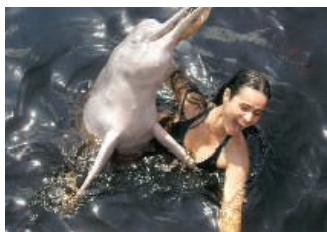
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HIGHLIGHTS FROM OUR DAILY NEWS COVERAGE

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Microbe's hydrocarbon stew could one day supplant fossil fuels.

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Find hints at development of religion during crucial time in human history.



Lessons for postdocs.

SCIENCE CAREERS

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FREE CAREER RESOURCES FOR SCIENTISTS

Taken for Granted: Postdocs and Joe the Plumber

B. L. Benderly

What early-career scientists can learn from the working class.

In Person: The Trick to a Rewarding Career

M. Hermann

Throughout his career, Marc Hermann has always done exactly what he wanted.

U.K. Visa Changes Mean Closer Scrutiny for Non-European Students

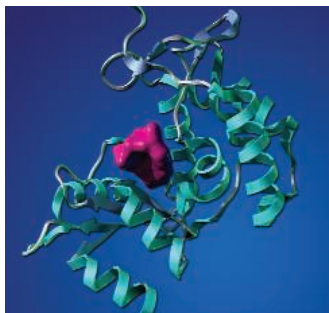
A. Saini

New U.K. immigration policies impose more rigid requirements than in the past.

November 2008 Funding News

J. Fernández

Learn about the latest in research funding, scholarships, fellowships, and internships.



CD38, NAADP controller.

SCIENCE SIGNALING

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THE SIGNAL TRANSDUCTION KNOWLEDGE ENVIRONMENT

REVIEW: NAADP—A Universal Ca²⁺ Trigger

A. H. Guse and H. C. Lee

NAADP elicits an initial release of calcium, which is subsequently amplified through the action of other calcium messengers.

ST NETWATCH: The Nobel Prize in Chemistry 2008

This year's award went to the scientists who discovered green fluorescent protein and developed it as an experimental tool; in Awards and Announcements.

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