

Science

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Programa de
Biotecnología
004

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1975

27 JUL 2009

EDITORIAL

- 1491 Science Journalism Goes Global
Cristine Russell

NEWS OF THE WEEK

- 1496 After Delays, WHO Agrees:
The 2009 Pandemic Has Begun
- 1497 Expanded U.S. Drug Agency to
Control Tobacco
- 1498 Report Calls for Grassroots But
Comprehensive Changes
- 1499 Verification Experts Puzzled Over
North Korea's Nuclear Test
- 1499 From *Science's* Online Daily News Site
- 1500 A Final Push to Divvy Up the Sea
by All the Rules
- 1500 After Outcry, Government Backpedals
Over Internet-Filtering Software
- 1501 From the *Science* Policy Blog
- 1502 Italy's MIT Grows, and So Does
Controversy Over It
- 1503 American Astronomical Society
214th Meeting
Dark-Matter Model Multiplies Mass of
Galactic Black Holes
Star Studies Yield Better Yardsticks

NEWS FOCUS

- 1504 The Promise of a Cure:
20 Years and Counting
>> Science Podcast
- 1508 Radio Astronomers Go for High Gain
With Mammoth Telescope
- 1510 ISO ... 3.5 Million U.S. Jobs
- 1512 Is Quantum Mechanics Tried, True,
Wildly Successful, and Wrong?

LETTERS

- 1514 Venezuelan Science at Risk
C. Bifano

Cataloguing Names the Old-Fashioned Way

- J. Beall*
Too Much Quantification Hinders Creativity
M. Gurkiewicz and A. Korngreen
Livestock Genomics in Developing Countries
P. J. Boettcher and I. Hoffmann
Machines Fall Short of Revolutionary Science
P. W. Anderson and E. Abrahams

1516 TECHNICAL COMMENT ABSTRACTS

BOOKS ET AL.

- 1517 Sustainable Energy
D. MacKay, reviewed by M. Hoffert
- 1518 First Peoples in a New World
D. J. Meltzer, reviewed by T. Flannery

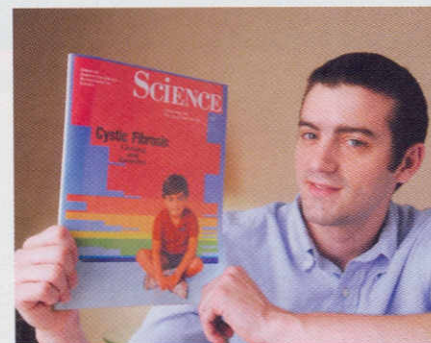
POLICY FORUM

- 1519 Nutrient Imbalances in
Agricultural Development
P. M. Vitousek et al.

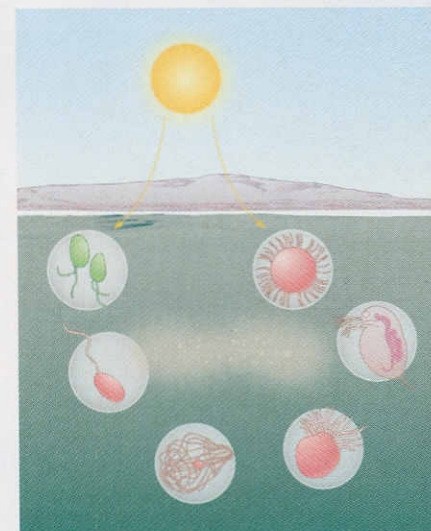
PERSPECTIVES

- 1521 No Place Too Cold
J. Laybourn-Parry
>> Perspective p. 1523
- 1522 Squeezing the Water Out of HCl(aq)
T. S. Zwier
>> Report p. 1545
- 1523 Thriving in Salt
A. Boetius and S. Joye
>> Perspective p. 1521
- 1525 A Chronic Need for IL-21
L. D. S. Johnson and S. C. Jameson
>> Reports pp. 1569, 1572, and 1576
- 1526 Extracting Potentials from Spectra
P. F. Bernath
>> Report p. 1548
- 1527 Bridging the Gap and Staying Local
M. Korte
>> Research Article p. 1536
- 1528 Uniting Alignments and Trees
A. Löytynoja and N. Goldman
>> Report p. 1561

CONTENTS continued >>



page 1504



page 1521



COVER

The current global outbreak of influenza A (H1N1) in humans appears to have originated in Mexico from infected pigs. The cover portrait is of "Patient Zero" from La Gloria, Veracruz, who is now well. Fraser *et al.* (page 1557) report on an initial epidemiological analysis and offer baseline estimates for transmissibility while acknowledging the prevailing uncertainties at this early stage of the epidemic.

Photo: Erich Schlegel/Rapport/Newscom

DEPARTMENTS

- 1489 This Week in *Science*
1493 Editors' Choice
1494 *Science* Staff
1495 Random Samples
1590 New Products
1591 *Science* Careers

REVIEW

- 1530 Graphene: Status and Prospects
A. K. Geim

BREVIA

- 1535 Sexual Intercourse Involving Giant Sperm in Cretaceous Ostracode
R. Matzke-Karasz et al.
Giant ostracode sperm date back at least 100 million years ago.

RESEARCH ARTICLE

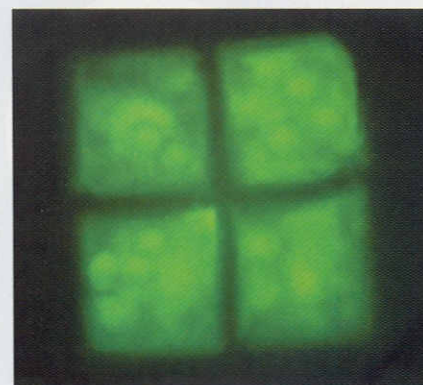
- 1536 Synapse- and Stimulus-Specific Local Translation During Long-Term Neuronal Plasticity
D. O. Wang et al.
Live-cell microscopy reveals local translation during long-term facilitation of *Aplysia* sensory-motor synapses.
>> Perspective p. 1527

REPORTS

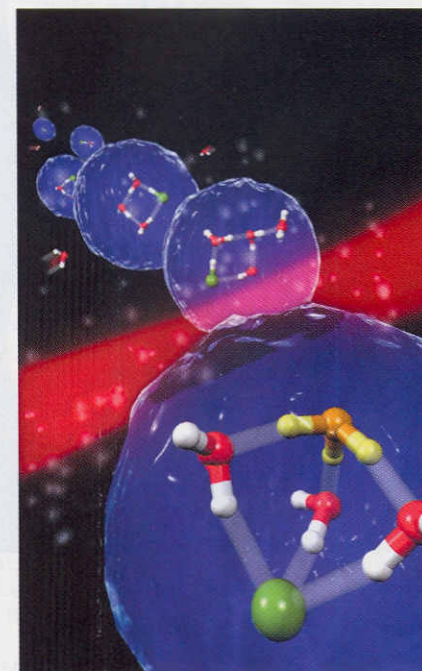
- 1540 Solar-Like Oscillations in a Massive Star
K. Belkacem et al.
A huge star has been discovered that shows a variety of regular patterns of pulsation.
- 1542 Colloidal Quantum-Dot Photodetectors Exploiting Multiexciton Generation
V. Sukhovatkin et al.
Decay of multiple electron-hole pairs, a hindrance in photovoltaic design, proves a boon to sensitivity in a photoconductive detector.
- 1545 Aggregation-Induced Dissociation of $\text{HCl}(\text{H}_2\text{O})_4$ Below 1 K: The Smallest Droplet of Acid
A. Gutberlet et al.
Just four water molecules are sufficient to dissolve the acid HCl into a charged ion pair of proton and chloride.
>> Perspective p. 1522
- 1548 Beryllium Dimer—Caught in the Act of Bonding
J. M. Merritt et al.
High-resolution spectroscopy maps out the unusual ground state electronic potential of the beryllium dimer.
>> Perspective p. 1526
- 1551 Atmospheric Carbon Dioxide Concentration Across the Mid-Pleistocene Transition
B. Hönisch et al.
The concentration of CO_2 in the atmosphere has been relatively stable over the past 2.1 million years and never as high as it is today.
- 1554 Fossil Plant Relative Abundances Indicate Sudden Loss of Late Triassic Biodiversity in East Greenland
J. C. McElwain et al.
Plant fossils from East Greenland record an abrupt decrease in abundance as CO_2 levels increased.

- 1557 Pandemic Potential of a Strain of Influenza A (H1N1): Early Findings
C. Fraser et al.
An international collaborative effort has analyzed the initial dynamics of the swine flu outbreak.
- 1561 Rapid and Accurate Large-Scale Coestimation of Sequence Alignments and Phylogenetic Trees
K. Liu et al.
A step-wise algorithm iteratively wraps sequence alignment around a phylogenetic tree to reduce bias caused by errors.
>> Perspective p. 1528
- 1565 Structure and Mechanism of an Amino Acid Antiporter
X. Gao et al.
The architecture of a membrane protein channel helps explain how *Escherichia coli* survive the acidic conditions of the stomach.
- 1569 IL-21 Is Required to Control Chronic Viral Infection
H. Elsaesser et al.
Interleukin-21 produced by CD4^+ T cells helps CD8^+ T cells control viral infection in a mouse model.
>> Perspective p. 1525
- 1572 A Vital Role for Interleukin-21 in the Control of a Chronic Viral Infection
J. S. Yi et al.
The cytokine interleukin-21 has a profound impact on virus-specific T cell responses to chronic infections in mice.
>> Perspective p. 1525
- 1576 IL-21R on T Cells Is Critical for Sustained Functionality and Control of Chronic Viral Infection
A. Fröhlich et al.
Thymus cells of the immune system require the cytokine interleukin-21 to control chronic viral infections.
>> Perspective p. 1525
- 1580 Merkel Cells Are Essential for Light-Touch Responses
S. M. Maricich et al.
In the skin, special cells with specific properties endow their afferent nerves with the ability to resolve fine spatial details.
>> Science Podcast
- 1583 Recruitment of an Area Involved in Eye Movements During Mental Arithmetic
A. Knops et al.
Addition and subtraction are encoded in the same part of the brain that is responsible for eye movements and spatial attention.

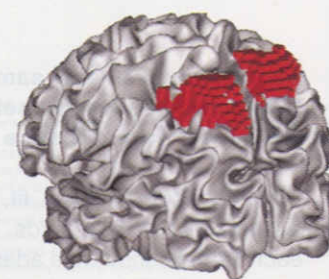
CONTENTS continued >>



page 1523



pages 1522 & 1545



page 1583

SCIENCEONLINE

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Successful Conservation of a Threatened *Maculinea* Butterfly

J. A. Thomas et al.

Prediction of population dynamics in relation to habitat requirements has led to a conservation success in the UK.

10.1126/science.1175726

Penumbral Structure and Outflows in Simulated Sunspots

M. Rempel et al.

Simulations of sunspots show that their structure and outflows can be understood in terms of convection in a magnetic field.

10.1126/science.1173798

Consistency Between Satellite-Derived and Modeled Estimates of the Direct Aerosol Effect

G. Myhre

Observational data and modeling narrows the large range of uncertainty about how much aerosols influence climate.

>> *Science Podcast*

10.1126/science.1174461

Functional Amyloids as Natural Storage of Peptide Hormones in Pituitary Secretory Granules

S. K. Majji et al.

Peptide and protein hormones are stored in secretory granules in a non-pathological amyloid conformation.

10.1126/science.1173155

Translocator Protein (18 kD) as Target for Anxiolytics Without Benzodiazepine-Like Side Effects

R. Rupprecht et al.

Possible drug alternative for rapid treatment of anxiety disorders could replace benzodiazepines.

10.1126/science.1175055

TECHNICALCOMMENTS

Comment on "Experimental Test of Self-Shielding in Vacuum Ultraviolet Photodissociation of CO"

J. R. Lyons et al.

full text at www.sciencemag.org/cgi/content/full/324/5934/1516-a

Comment on "Experimental Test of Self-Shielding in Vacuum Ultraviolet Photodissociation of CO"

S. R. Federman and E. D. Young

full text at www.sciencemag.org/cgi/content/full/324/5934/1516-b

Comment on "Experimental Test of Self-Shielding in Vacuum Ultraviolet Photodissociation of CO"

Q.-Z. Yin et al.

full text at www.sciencemag.org/cgi/content/full/324/5934/1516-c

Response to Comments on "Experimental Test of Self-Shielding in Vacuum Ultraviolet Photodissociation of CO"

S. Chakraborty et al.

full text at www.sciencemag.org/cgi/content/full/324/5934/1516-d

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Some raindrops fall to the ground much faster than expected.

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RESEARCH ARTICLE: Suppression of LPS-Induced TNF- α Production in Macrophages by cAMP Is Mediated by PKA-AKAP95-p105

E. A. Wall et al.

PERSPECTIVE: Putting on the Brakes—Cyclic AMP as a Multipronged Controller of Macrophage Function

M. Peters-Golden

Distinct anchoring proteins enable cAMP signaling to selectively modulate macrophage responses to pathogens.

REVIEW: The Vitamin D Sterol-Vitamin D Receptor Ensemble Model Offers Unique Insights into Both Genomic and Rapid-Response Signaling

M. T. Mizwicki and A. W. Norman

Different vitamin D conformations binding to different pockets of a flexible receptor could elicit distinct responses.

PROTOCOL: Using a Microfluidic Device for High-Content Analysis of Cell Signaling

R. Cheong et al.

This method for analyzing individual cells reveals differences in responses masked by averaging across the population.

SCIENCE CAREERS

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Free Career Resources for Scientists

Professional Polish

S. Webb

When dressing for a job interview, it pays to cultivate conformity and attention to detail.

Following in Darwin's Footsteps

E. Pain

Jordi Serrallonga has developed a career where research and travel are both adventures.

Tooling Up: Four Must-Haves for Convincing Communication

D. Jensen

Anyone can learn to communicate effectively by learning a few key points.



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Tidal forces need to be just right for life.



SCIENCE SIGNALING

Single-cell analysis with microfluidics.

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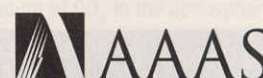
blogs.sciencemag.org/origins
A History of Beginnings

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