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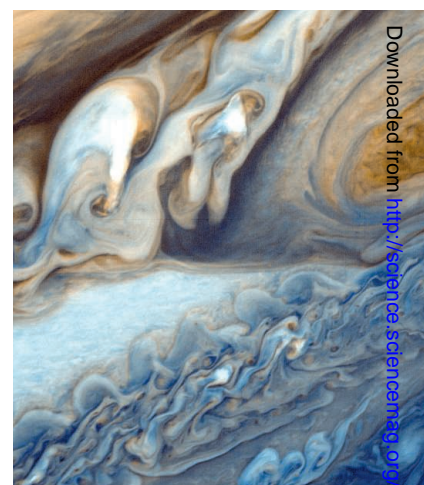
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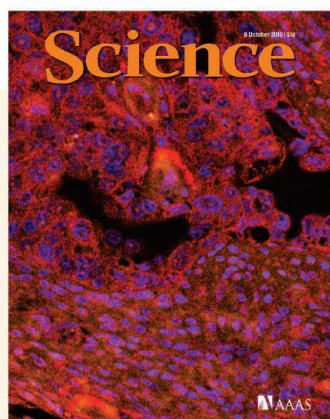


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## COVER

Confocal microscopy image of human ovarian clear cell carcinoma tissue. Cancerous epithelial cells are stained bright red (top half of image) and are bordered by supporting stromal cells (bottom and upper right corner). Cell nuclei are stained purple. Genetic analysis by Jones *et al.* suggests that aberrant chromatin remodeling contributes to the pathogenesis of this cancer. See page 228.

*Image: Ie-Ming Shih and Bin Guan*

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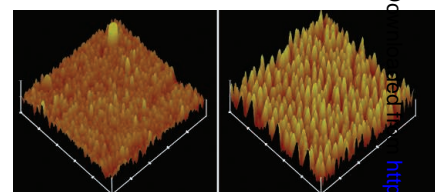
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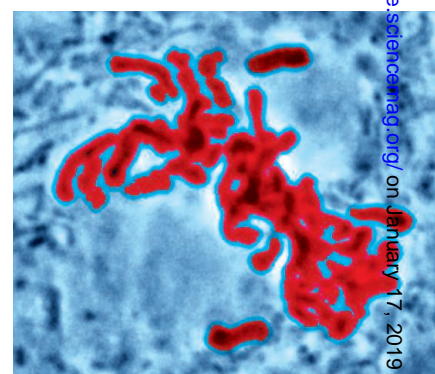
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## SCIENCEONLINE

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### Zooming In on Microscopic Flow by Remotely Detected MRI

V. S. Bajaj et al.

A magnetic resonance imaging system allows finer analysis of fluid flow.

10.1126/science.1192313

### Structures of the CXCR4 Chemokine GPCR with Small-Molecule and Cyclic Peptide Antagonists

B. Wu et al.

Five crystal structures provide insight into chemokine and HIV-1 recognition.

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### Mcl-1 Is Essential for Germinal Center Formation and B Cell Memory

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A protein that inhibits apoptosis is essential for the survival of immune memory cells.

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## TECHNICALCOMMENTS

### Comment on "Climate, Critters, and Cetaceans: Cenozoic Drivers of the Evolution of Modern Whales"

N. D. Pyenson et al.

Full text at [www.sciencemag.org/cgi/content/full/330/6001/178-a](http://www.sciencemag.org/cgi/content/full/330/6001/178-a)

### Response to Comment on "Climate, Critters, and Cetaceans: Cenozoic Drivers of the Evolution of Modern Whales"

F. G. Marx and M. D. Uhen

Full text at [www.sciencemag.org/cgi/content/full/330/6001/178-b](http://www.sciencemag.org/cgi/content/full/330/6001/178-b)

## SCIENCENOW

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### Highlights From Our Daily News Coverage

#### West Virginia Is a Geothermal Hot Spot

Researchers uncover a warm zone that could be used for green energy projects.

#### Twofer for the Biggest Bioterror Threats?

Dual vaccine could replace existing shots against smallpox and anthrax—and have advantages over both.

#### Whale Snot, Fruit Bat Fellatio Take Home This Year's Ig Nobels

Ceremony recognizes offbeat, humorous science.

## SCIENCE SIGNALING

[www.sciencesignaling.org](http://www.sciencesignaling.org)

The Signal Transduction Knowledge Environment

### RESEARCH ARTICLE: Apolipoprotein E Controls ATP-Binding Cassette Transporters in the Ischemic Brain

A. ElAli and D. M. Hermann

## PODCAST

D. M. Hermann and A. M. VanHook

Inhibition of apolipoprotein E signaling is a potential clinical strategy for enhancing the delivery of neuroprotective drugs to the brain after ischemic stroke.

### RESEARCH ARTICLE: Nonsynaptic Communication Through ATP Release from Volume-Activated Anion Channels in Axons

R. D. Fields and Y. Ni

Axonal swelling allows neurons to communicate with glia by ATP released from volume-activated anion channels.

### PERSPECTIVE: Mechanisms of Sperm-Egg Interactions: Between Sugars and Broken Bonds

P. E. Visconti and H. M. Florman

New evidence reveals a more complex scenario for early events in mammalian fertilization.

## GLOSSARY

Find out what DNA-PK, SURF, and PIKK mean in the world of cell signaling.

## SCIENCE CAREERS

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Free Career Resources for Scientists

### Editorial: Happy 15th Birthday to Us

J. Austin

On the occasion of the 15th anniversary of our first issue, the editor of *Science* Careers makes a few observations and suggestions.

### Top Ten Tips for Mentors

P. Clifford and J. Lakoski

Being an effective mentor requires being a good listener, setting boundaries, providing support and criticism, and celebrating milestones.

### Finding a Future in Management Consulting

E. Pain

When she couldn't find a professorship in her native Portugal, medical physicist Francisca Leite tried something completely new.

## SCIENCE TRANSLATIONAL MEDICINE

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Integrating Medicine and Science

### COMMENTARY: Opening Up to Precompetitive Collaboration

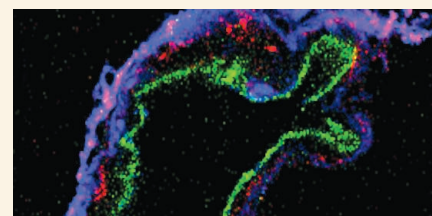
J. S. Altschuler et al.

Increasing biomedical R&D efficiency and innovation boosts collaborations that span the precompetitive space.

### COMMENTARY: The Bayh-Dole Act Turns 30

V. Loise and A. J. Stevens

An act allowing U.S. institutions to claim title to inventions made with federal funding increases public benefits from research.



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### RESEARCH ARTICLE: Effects of AIN457, a Fully Human Antibody to Interleukin-17A, on Psoriasis, Rheumatoid Arthritis, and Uveitis

W. Hueber et al.

An antibody to a proinflammatory factor may be effective for treating three immune-mediated human diseases.

### RESEARCH ARTICLE: PGC-1 $\alpha$ , A Potential Therapeutic Target for Early Intervention in Parkinson's Disease

B. Zheng et al.

A master controller of genes for energy regulation is a potential new therapeutic target for Parkinson's disease.

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**SCIENCE** (ISSN 0036-8075) is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals Mail postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 2010 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (51 issues): \$146 (\$74 allocated to subscription). Domestic institutional subscription (51 issues): \$910; Foreign postage extra: Mexico, Caribbean (surface mail) \$55; other countries (air assist delivery) \$85. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request, GST #1254 88122. Publications Mail Agreement Number 1069624. Printed in the U.S.A.

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**330 (6001)**

*Science* **330** (6001), 147-247.

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