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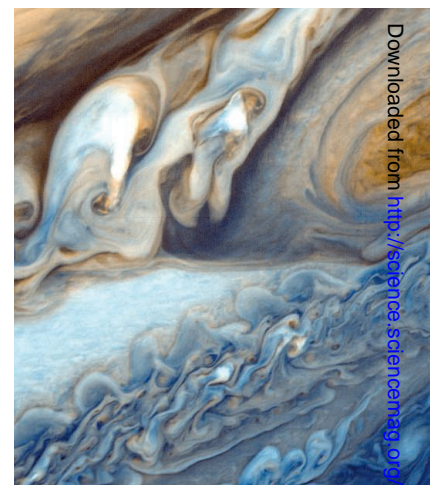
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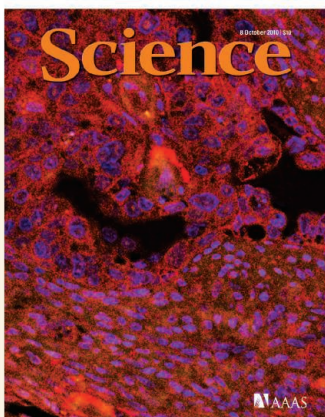


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COVER

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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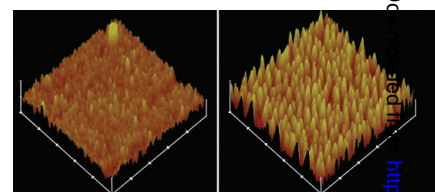
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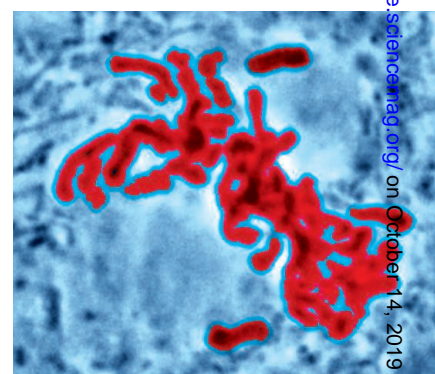
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Zooming In on Microscopic Flow by Remotely Detected MRI

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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.

10.1126/science.1194396

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.

10.1126/science.1191793

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Mutations causing a rare skin disease reveal a signaling pathway that is a drug target for Alzheimer's disease.

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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/ful/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/ful/330/6001/178-b

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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

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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

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

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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.

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COMMENTARY: Opening Up to Precompetitive Collaboration

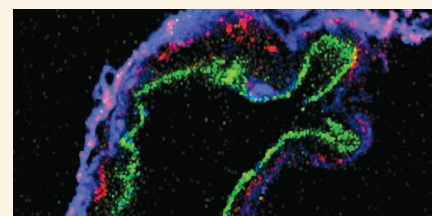
J. S. Altschuler et al.

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

COMMENTARY: The Bayh-Dole Act Turns 30

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



SCIENCE SIGNALING

Regulating drug transport in and out of the brain.

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 α , 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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