



COVER

Laser-surveyed topography of the elevation in a Pennsylvania landscape, showing evidence of sediment-filled early American millponds along a stream valley. Terraces around the stream channel descend stepwise from upstream to downstream (dark purple, light purple, pink), each associated with a dam. The deeper stream incision into the two downstream terraces is due to more complete dam breaching. See page 299.

Image: U.S. Geological Survey (LIDAR data and preliminary processing); Michael Rahnis (image analysis and generation)

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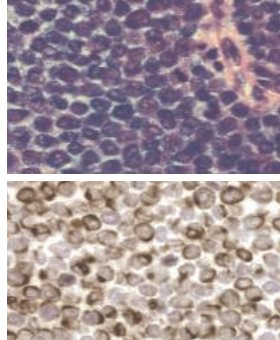
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A Shared Docking Motif in TRF1 and TRF2 Used for Differential Recruitment of Telomeric Proteins

Y. Chen et al.

Two similar members of the protein complex that protects the free ends of chromosomes have distinct binding sites for other complex members and accessory proteins.

10.1126/science.1151804

CELL BIOLOGY

Differential Regulation of Dynein and Kinesin Motor Proteins by Tau

R. Dixit, J. L. Ross, Y. E. Goldman, E. L. F. Holzbaur

The motor proteins dynein and kinesin both encounter the protein tau as they move along the microtubules; the former reverses direction, whereas the latter detaches.

10.1126/science.1152993

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Clonal Integration of a Polyomavirus in Human Merkel Cell Carcinoma

H. Feng, M. Shuda, Y. Chang, P. S. Moore

A rare, but highly aggressive, form of human skin cancer may be caused by a previously uncharacterized human polyomavirus.

10.1126/science.1152586

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Rogue Mantle Helium and Neon

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Anomalous high ratios of ³He to ⁴He in the recycled basalts under ocean islands may result from helium diffusing in from more pristine, primitive mantle.

10.1126/science.1150060

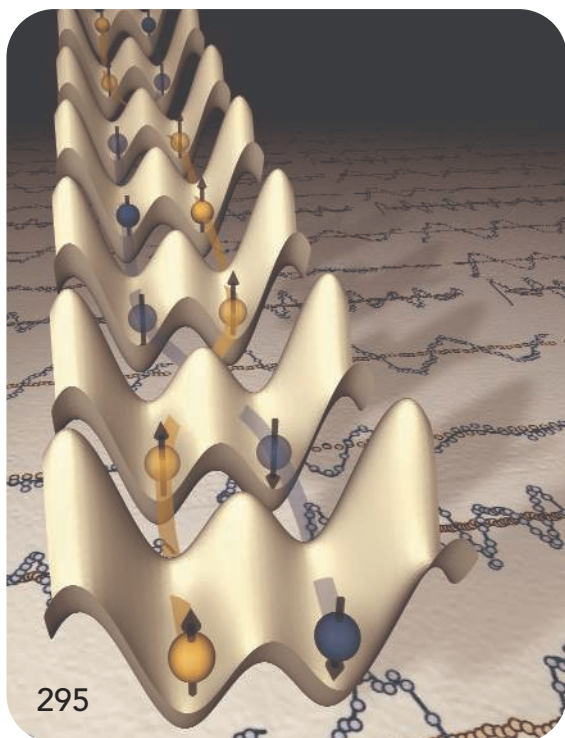
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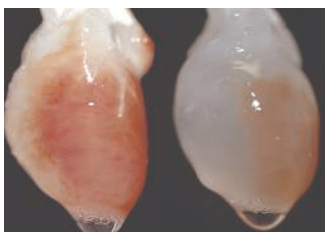
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SCIENCE (ISSN 0036-8075) is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals Mail postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 2008 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): \$144 (\$74 allocated to subscription). Domestic institutional subscription (51 issues): \$770; 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. SCIENCE is printed on 30 percent post-consumer recycled paper. **Printed in the U.S.A.**

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Anticipation of quality activates our brain’s pleasure center.



Making a graceful exit.

SCIENCE CAREERS

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MiSciNet: Following the Image

A. Sasso

Ahna Skop built a career from things others pass over, from cellular detritus to shy high school students.

Mind Matters: Leaving a Lab Gracefully

I. S. Levine

When it’s time to leave the lab, the key is to make sure the end isn’t bitter.

Tooling Up: Dealing With Men Who Have a Problem With Women

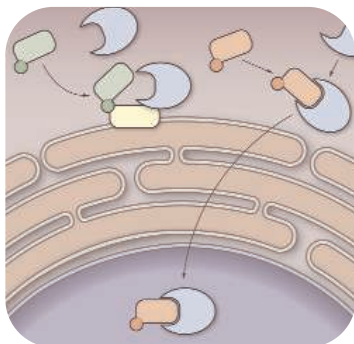
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You’re likely to encounter men who have never learned how to relate to strong, competent women.

From the Archives: You’ve Worked Hard to Get This Far

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Don’t blow your academic job interview.



Proteins escape from the ER surface.

SCIENCE SIGNALING

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PERSPECTIVE: The Endoplasmic Reticulum Takes Center Stage in Cell Cycle Regulation

P. Fearon and O. Cohen-Fix

The ER appears to play a key role in controlling the spatial localization of proteins involved in the cell cycle.

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