The influence of human society on the future of the world’s forests and the role of forests in the global carbon cycle are discussed in the special section beginning on page 1435.

Image: Micha Pawlitzki/Zefa/Corbis

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An in Vivo Map of the Yeast Protein Interactome K. Tarassov et al.
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BIOCHEMISTRY
Recognition Dynamics Up to Microseconds Revealed from an RDC-Derived Ubiquitin Ensemble in Solution O. F. Lange et al.
In solution, ubiquitin assumes all conformations seen in crystal structures of its complexes, indicating that it binds by conformational selection rather than induced fit.
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Evidence for Upwelling of Corrosive "Acidified" Water onto the Continental Shelf
R. A. Feely et al.
As a result of anthropogenic CO$_2$ uptake, corrosive seawater undersaturated with calcium carbonate shoaled on the continental shelf of western North America in 2007.

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Regulation of Hepatic Lipogenesis by the Transcription Factor XBP1
In mice, a transcription factor known to participate in secretion is also necessary for induction of lipid synthesis by carboxydrates in the liver. >> Perspective p. 1433

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The Rag GTPases Bind Raptor and Mediate Amino Acid Signaling to mTORC1
Y. Sancak et al.
Nutrients, specifically amino acids, are sensed by small guanosine triphosphatases, which bind to a signaling complex, moving it close to the nucleus where it initiates cell growth.

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Animal Versus Wind Dispersal and the Robustness of Tree Species to Deforestation
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VelB/VeA/LaeA Complex Coordinates Light Signal with Fungal Development and Secondary Metabolism
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Activation of the Cellular DNA Damage Response in the Absence of DNA Lesions
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Protein complexes that usually assemble on and repair damaged DNA can form at undamaged sites to halt the cell cycle if several of the proteins are first tethered there.

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Transfer of Learning After Updating Training Mediated by the Striatum
E. Dahlin, A. S. Neely, A. Larsson, L. Bäckman, L. Nyberg
Individuals who become better at a letter recognition test through practice also improve at a different task, even without practice, when both tasks utilize the same brain region.

SPECIAL FEATURE
Careers in Forest Ecology
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Sustaining Forests in a Changing World
A Self-Made Climber
Measuring the Impact of Invasive Plants
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Multiple interacting proteins modulate the activity of the serine/threonine kinase Akt.

PERSPECTIVE: pVHL—A Multipurpose Adaptor Protein
I. J. Frew and W. Krek
The von Hippel-Lindau tumor suppressor controls transcription-dependent and -independent cellular processes.

PODCAST
E. M. Adler and A. M. VanHook
Microvesicles carrying an oncogenic form of the epidermal growth factor receptor provide a mechanism for lateral spread of the malignant phenotype.

GLOSSARY
Find out what ASC, ChIP, and SNS mean in the world of cell signaling.

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Forests in Flux

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K. Travis
The young rainforest ecologist talks about what it’s like to work in the forest canopy.

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VIDEO: Forests in Flux
An accompaniment to this week’s special section on the future of forests in light of climate change and human activity.

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