EDITORIAL

NEWS OF THE WEEK

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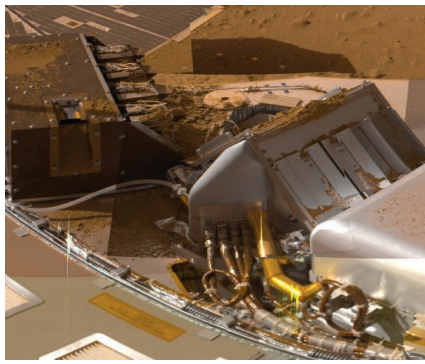

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COVER

Seeds in storage containers destined for the Millennium Seed Bank, a conservation project run by Kew Gardens, UK, which now houses 10 percent of the world's plant species as seeds. The conservation of biodiversity is in the spotlight as scientists, nongovernmental organizations, and politicians prepare for the Convention on Biological Diversity in Nagoya, Japan, in October 2010. See the special News Focus section beginning on page 1272 and the Review on page 1298.

Photo: Bryan and Cherry Alexander/Alamy

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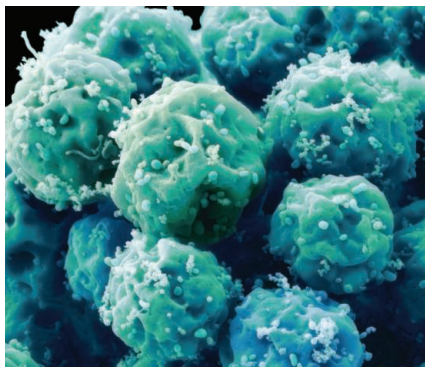

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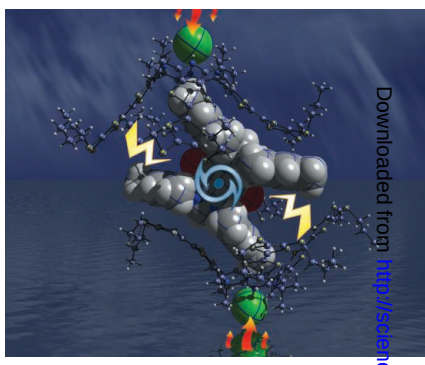

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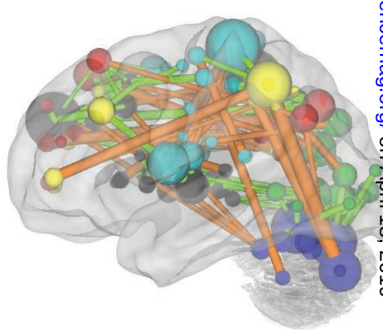

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SCIENCEONLINE

SCIENCEXPRESS
www.sciencexpress.org

Frequent Mutations of Chromatin Remodeling Gene *ARID1A* in Ovarian Clear Cell Carcinoma
S. Jones et al.
Genetic analysis of a rare but aggressive form of ovarian cancer implicates a chromatin remodeling defect in disease development.
10.1126/science.1196333

Greater Neural Pattern Similarity Across Repetitions Is Associated with Better Memory
G. Xue et al.
Similarity in neural representations is associated with better memory, as well as conscious cognition.
10.1126/science.1193125

Cellodextrin Transport in Yeast for Improved Biofuel Production
J. M. Galazka et al.
Reconstitution of a fungal transport system allows yeast to grow on sugars derived from cellulose.
10.1126/science.1192838

Tau Reduction Prevents Aβ-Induced Defects in Axonal Transport
K. A. Vossel et al.
A mechanism for the protective effects of tau reduction in mouse models of Alzheimer's disease.
10.1126/science.1194653
>> Science *Podcast*

Universal Dynamical Decoupling of a Single Solid-State Spin from a Spin Bath
G. de Lange et al.
The coherence time of single spins is extended by a sequence of microwave pulses.
10.1126/science.1192739

Neutrino Spectroscopy Can Probe the Dark Matter Content in the Sun
I. Lopes and J. Silk
Dark matter in the center of the Sun would affect its internal structure and lead to a distinctive neutrino emission pattern.
10.1126/science.1196564

SCIENCENOW
www.sciencenow.org
Highlights From Our Daily News Coverage

Forget Mice, Elephants Really Hate Ants
An aversion to biting ants keeps elephants from ravaging the savanna.

How Fish Oil Fights Inflammation
Omega-3 fatty acids work via a specific receptor and may combat diabetes as well.

'Impossible' Soccer Goal Explained by New Twist on Curveball Physics
Analysis of stunning kick shows how spinning balls follow spiral paths.

SCIENCESIGNALING
www.sciencesignaling.org
The Signal Transduction Knowledge Environment

EDITORIAL GUIDE: Looking Ahead to the Past
M. B. Yaffe
Chief Scientific Editor Michael Yaffe makes his predictions for exciting new areas of signaling-related research.

JOURNAL CLUB: Receptor Tyrosine Kinase Transmembrane Domain Interactions—Potential Target for "Interceptor" Therapy
A. Kajanajmudeen
Disrupting intermolecular interactions between transmembrane domains is a potential method for attenuating signaling through receptor tyrosine kinases.

PERSPECTIVE: NF-κB—Much Learned, Much to Learn
B. Razani and G. Cheng
The book ***NF-κB: A Network Hub Controlling Immunity, Inflammation, and Cancer*** provides an overview of various aspects of NF-κB signaling.

SCIENCECAREERS
www.sciencecareers.org/career_magazine
Free Career Resources for Scientists

Mind Matters: Anxiety in the Workplace
I. Levine
Everyone feels a bit nervous from time to time, but excessive anxiety can be disabling and derail careers.

Testing Mother Earth's Resilience
E. Pain
Growing up in Kruger National Park in South Africa allowed Reinette Biggs to shape her research career in unusual ways.

SCIENCETRANSLATIONAL MEDICINE
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Integrating Medicine and Science

PERSPECTIVE: Genome-Wide Association Studies Identify New Targets in Cardiovascular Disease
A. C. Calkin and P. Tontonoz
Analysis indicates that increasing expression of the *SORT1* gene in the liver has beneficial effects on blood lipid levels.

RESEARCH ARTICLE: Integration of Early Physiological Responses Predicts Later Illness Severity in Preterm Infants
S. Saria et al.
Physiological parameters routinely and noninvasively collected in the first 3 hours of life can accurately predict morbidity in premature infants.

SCIENCESIGNALING
Alice, the White Queen, and seemingly impossible things.

RESEARCH ARTICLE: Nuclear Phospho-Akt Increase Predicts Synergy of PI3K Inhibition and Doxorubicin in Breast and Ovarian Cancer
J. J. Wallin et al.

PERSPECTIVE: Targeting a Common Collaborator in Cancer Development
A. P. Myers and L. C. Cantley
A small molecule inhibitor of phosphatidylinositol 3-kinase enhances the cytotoxic effects of the common chemotherapeutic agent doxorubicin in breast and ovarian cancer cell lines.

SCIENCEPODCAST
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