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Photo: Jim Richardson/National Geographic/Getty Images

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www.sciencexpress.org
The Structure of the Eukaryotic Ribosome at 3.0 Å Resolution
A. Ben-Shem et al.
A close-up view of the ribosome’s 79 proteins and 5500 RNA nucleotides.
10.1126/science.1212642
Imaging of Plasmodium Liver Stages to Drive Next-Generation Antimalarial Drug Discovery
S. Meister et al.
Imidazolopiperazine compounds inhibit liver-stage malaria parasites with one oral dose in mice.
10.1126/science.1211936
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Host Proteasomal Degradation Generates Amino Acids Essential for Intracellular Bacterial Growth
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The bacterial pathogen Legionella pneumophila ensures amino acid supplies by promoting degradation of target host proteins.
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Calibrating the End-Permian Mass Extinction
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The Origin of OB Runaway Stars
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Most of the unusually fast, young stars in our galaxy are produced in three-body encounters within dense clusters of stars.
10.1126/science.1211927

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Comment on “Global Trends in Wind Speed and Wave Height”
F. J. Wentz and L. Ricciardulli
Full text at www.sciencemag.org/cgi/content/full/334/6058/905-b
Response to Comment on “Global Trends in Wind Speed and Wave Height”
I. R. Young et al.
Full text at www.sciencemag.org/cgi/content/full/334/6058/905-c

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Leonardo’s Formula Explains Why Trees Don’t Splitter
This geometry rule probably evolved to help prevent wind breakage.
http://scim.ag/leotrees
Not Pulling Your Leg: Tractor Beams May Be Possible
Several different groups come up with similar ideas for laser beams that can pull objects.
http://scim.ag/tractor-beam
Ancient Landslide Merged Trout Populations
River blockade explains surprising genetic similarities in two groups of fish.
http://scim.ag/land-slide

SCIENCE SIGNALING
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The Signal Transduction Knowledge Environment
15 November issue: http://scim.ag/ss111511

RESEARCH ARTICLE: Signaling by the Matrix Proteoglycan Decorin Controls Inflammation and Cancer Through PDCD4 and MicroRNA-21
R. Merlina et al.
A component of the extracellular matrix promotes inflammatory responses in sepsis and in tumors.

RESEARCH ARTICLE: Local Application of Neurotrophins Specifies Axons Through Inositol 1,4,5-Trisphosphate, Calcium, and Ca2+/Calmodulin–Dependent Protein Kinases
S. Nakamuta et al.
Neurotrophins stimulate calcium signaling to promote axon specification.

RESEARCH ARTICLE: The Long-Term Survival Potential of Mature T Lymphocytes Is Programmed During Development in the Thymus
C. Sinclair et al.
T cell receptor signaling in thymocytes determines their responsiveness to a survival cytokine later in life.

ST NETWATCH: The Nobel Prize in Physiology or Medicine 2011
This year’s Prize was awarded for breakthroughs in innate and adaptive immunity.

SCIENCE TRANSLATIONAL MEDICINE
www.sciencetranslationalmedicine.org
Integrating Medicine and Science
16 November issue: http://scim.ag/stm111611
FOCUS: Biomarker-Based Early Cancer Detection—Is It Achievable?
W. D. Hazleton and E. G. Luebeck
A new mathematical model evaluates the power of blood-based biomarkers for early cancer detection.

RESEARCH ARTICLE: Mathematical Model Identifies Blood Biomarker–Based Early Cancer Detection Strategies and Limitations
S. S. Hori and S. S. Gambhir
Early cancer detection using current clinical blood-based biomarker assays may not be possible within the first 10 years of tumor growth.

PERSPECTIVE: Targeting Chaperone-Mediated Autophagy in Cancer
A. Tharburn and J. Debnath
Tumors need chaperone-mediated autophagy for growth and metastasis.

RESEARCH ARTICLE: Chaperone-Mediated Autophagy Is Required for Tumor Growth
M. Kon et al.
Cancer cells depend on chaperone-mediated autophagy for growth revealing a new target for preventing tumorigenesis and inducing tumor regression.

RESEARCH ARTICLE: Treatment and Prevention of Urinary Tract Infection with Orally Active FimH Inhibitors
C. K. Casimano et al.
Optimized mannoside compounds that block pathogenic Escherichia coli entry into bladder epithelium were effective in the treatment and prevention of urinary tract infections in mice.

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Tooling Up: Views on an Interview, Part 2
D. Jensen
Ups and downs continue during Scott Jackson’s interview at ABC Technologies.
http://scim.ag/ToolingUp2

Where Are the Neuroscience Jobs?
M. Price
Our correspondent reports from the Neuroscience 2011 meeting in Washington, D.C.
http://scim.ag/Neurocareers2011

A Mycologist Reaps the (Glowing) Fruit of His Labor
Patrick Hickey’s career has grown in a way as unpredictable as the organisms he cultivates.
http://scim.ag/Hickeyprofile

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