A New Dawn for Science in Africa
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A roundup of the week’s top stories

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Calling All Baby Boomers: Get Your Hepatitis C Test

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Bird Sense
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Water Security: Research Challenges and Opportunities
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Probing Black Hole Gravity
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How to Read the Chromatin Past
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Retaining the Nano in Nanocrystalline Alloys
J. R. Weertman
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The Unusual Case of Porcupine
L. Lum and H. Clevers

Walking on Solid Ground
B. F. Dickey
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Glycosylation to Adapt to Stress
K. R. Mattaini and M. G. Vander Heiden
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DeShields drawn image of cell surface in human lungs. The airway surface is lined by arrays of cylindrical cilia (shown as yellow projections) that are 7 micrometers long and 200 nanometers in diameter. The cilia and airway surface are covered by tethered biomacromolecules (shown as green hairs) that form dense, brushlike structures. These epithelial brushes protect the airways from infectious agents and ensure efficient flow of mucus from healthy lungs. See page 937. For the story behind the cover, go to http://scim.ag/cov6097.

Image: Yan Liang (www.l2xy2.com), Li-Heng Cai, Michael Rubinstein

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N. Gehrels and P. Mészáros

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937 A Periciliary Brush Promotes the Lung Health by Separating the Mucus Layer from Airway Epithelia
B. Button et al.
The lung is protected by a brushlike biopolymer that contributes to mucus flow and can trigger muco-obstructive diseases.
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942 PTF 11kx: A Type Ia Supernova with a Symbiotic Nova Progenitor
B. Dilday et al.
Spectroscopic data imply that a stellar explosion arose from a binary consisting of a white dwarf and a red giant star.
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946 Absorption Features in the X-ray Spectrum of an Ordinary Radio Pulsar
O. Kargaltsev et al.
Data from two x-ray space observatories reveal unexpected spectral features in a common, rotating, magnetized compact star.
949 A 200-Second Quasi-Periodicity After the Tidal Disruption of a Star by a Dormant Black Hole
R. C. Reis et al.
Oscillations in x-ray emission from a galaxy’s central black hole imply that a disc formed after the hole captured a star.
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951 Design of Stable Nanocrystalline Alloys
T. Chookajorn et al.
Designed nanostructured alloys, amenable to large-scale production, show high-temperature thermal stability.
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954 Stepwise Evolution of Spherical Seeds into 20-Fold Twinned Icosahedra
M. R. Langille et al.
The growth of silver nanoparticles from plasmonic gold nanocrystals was tracked by electron microscopy.
957 Mapping the Origins and Expansion of the Indo-European Language Family
R. Bouckaert et al.
Spatial models of language lineage evolution support an Anatolian homeland for Indo-European languages.
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960 Assembly of an Evolutionarily New Pathway for α-Pyrone Biosynthesis in Arabidopsis
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  Tumor genome sequencing reveals the molecular basis of a patient’s unexpected and dramatic response to a cancer drug.
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  T. W. Hand et al.
  Enteric infections induce lasting adaptive immunity against commensal bacteria that may play a role in intestinal problems.
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  J. Morf et al.
  An RNA-binding protein whose cyclic accumulation is regulated by body temperature confers robustness to circadian oscillators.
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  J. Austin
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