Giraffes eye a smorgasbord of Acacia at the Mpala Research Centre in Kenya. Large herbivores such as giraffes are key to maintaining a mutually beneficial relationship between ants and Acacia in an East African ecosystem. See page 192.

Photo: Amy Wolf

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VIROLOGY
Identification of Host Proteins Required for HIV Infection Through a Functional Genomic Screen
A. L. Brass et al.
An RNAi screen identified 237 new and 38 known human proteins required for HIV infection, including ones used in Golgi transport and in viral integration and transcription. > News story p. 143 10.1126/science.1152725

GENETICS
Widespread Genetic Incompatibility in C. elegans Maintained by Balancing Selection
H. S. Seidel, M. V. Rockman, L. Kruglyak
Strong natural selection is maintaining multiple alleles of a gene in wild populations of the nematode C. elegans, despite their negative effect on fitness. 10.1126/science.1151107

PHYSICS
Electronic Liquid Crystal State in the High-Temperature Superconductor YBa$_2$Cu$_3$O$_{6.45}$
V. Hinkov et al.
Neutron scattering measurements suggest that ordering of fluctuating electron spins explains the liquid crystal phases recently seen in some correlated electron systems. 10.1126/science.1152309

PHYSICS
Observation of the Spin Hall Effect of Light via Weak Measurements
O. Hosten and P. Kwiat
Displacement of light at an air-glass interface depends on its polarization, showing that photons have a spin Hall effect comparable to that seen for electrons. 10.1126/science.1152697

TECHNICAL COMMENT ABSTRACTS
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P. W. Boyd and D. Mackie
full text at www.sciencemag.org/cgi/content/full/319/5860/159a
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N. Cassar et al.
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GEOPHYSICS
Widespread Triggering of Nonvolcanic Tremor in California
J. Gomberg et al.
A large Alaskan earthquake triggered tremors along the San Andreas and other strike-slip faults in California, showing that this process is not specific to subduction zones. > Perspective p. 166; Report p. 186

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Stellar Feedback in Dwarf Galaxy Formation
S. Mashchenko, J. Wadsley, H. M. P. Couchman
Simulations show that stellar winds and material expelled from supernovae alter the gravitational potential of dwarf galaxies, perhaps explaining their dark matter cores.

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Superconducting Vortices in CeCoIn$_5$; Toward the Pauli-Limiting Field
A. D. Bianchi et al.
The response of CeCoIn$_5$ differs from that of other superconductors and from accepted theory because its superconducting state approaches a quantum critical point.

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Self-Assembled Water-Soluble Nucleic Acid Probe Tiles for Label-Free RNA Hybridization Assays
Y. Ke, S. Lindsay, Y. Chang, Y. Liu, H. Yan
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A. Karsan
Notch-dependent activation of R-Ras reverses H-Ras–mediated suppression of integrin activity.

Perspective: An Emerging Picture of Synapse Formation—A Balance of Two Opposing Pathways
F. Ono
A dispersing and a clustering pathway for acetylcholine receptors converge on the postsynaptic protein rapsyn in skeletal muscle.