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Structural Origin of Circularly Polarized Iridescence in Jeweled Beetles
V. Sharma et al.
The cellular ordering in the exoskeleton of a beetle is analogous to the molecular ordering in cholesteric liquid crystals.

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Chiral Isotropic Liquids from Achiral Molecules
L. E. Hough et al.
Banana-shaped molecules lacking handedness form a macroscopically isotropic fluid that still has overall chirality.

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Helical Nanofilament Phases
A. Boettiger and M. Levine

Positive Low-Level Cloud Feedback
A. C. Clement et al.
Decreased low-level cloud cover in the Northeast Pacific region amplifies increases in sea surface temperatures.

>> News story p. 376; Science Podcast

Environmental change has led to decreasing body size in a sheep population over 20 years, despite selection for increased size.

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Pathogenesis and Transmission of Swine-Origin 2009 A(H1N1) Influenza Virus in Ferrets
V. J. Munster et al.

Transmission and Pathogenesis of Swine-Origin 2009 A(H1N1) Influenza Viruses in Ferrets and Mice
T. R. Maines et al.
Animal experiments compare the dynamics and effects of the virus causing the 2009 flu outbreak to those of seasonal H1N1 flu.

Chlamydomonas Swims with Two “Gears”
in a Eukaryotic Version of Run-and-Tumble Locomotion
M. Polin et al.
Algal cilia beat synchronously for forward movement and asynchronously for turning.

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Translocator Protein (18 kD) as Target for Anxiolitics Without Benzodiazepine-Like Side Effects
R. Rupprecht et al.
Possible drug alternative for rapid treatment of anxiety disorders could replace benzodiazepines.

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A small G protein may limit the toxicity of mutant proteins. Researchers studying math education. How a Raindrop Is Like an Exploding Parachute.

High-speed videos reveal secret to raindrop size. No Risk in Disclosing Genetic Risks. Researchers find that patients suffer no adverse mental effects after hearing bad news. Elephants Don’t Always Keep It in the Family. When decimated by humans, elephants turn to friends to beef up their numbers.

Science Express:

Coupling Mechanics to Charge Transport in Carbon Nanotube Mechanical Resonators. B. Lassagne et al. 10.1126/science.1174290

Strong Coupling Between Single-Electron Tunneling and Nanomechanical Motion. G. A. Steele et al. Individual electrons tunneling onto and out of a carbon nanotube can be used to tune its oscillatory motion. 10.1126/science.1176076

Motile Cilia of Human Airway Epithelia Are Chemosensory. A. S. Shah et al. Airway epithelia directly sense and respond to noxious substances. 10.1126/science.1173869


Bcl6 Mediates the Development of T Follicular Helper Cells. R. I. Nurieva et al. A transcription factor controls follicular T helper cell differentiation. 10.1126/science.1176676

Science Online:

Highlights From Our Daily News Coverage

How a Raindrop Is Like an Exploding Parachute

No Risk in Disclosing Genetic Risks

Researchers find that patients suffer no adverse mental effects after hearing bad news.

Elephants Don’t Always Keep It in the Family

When decimated by humans, elephants turn to friends to beef up their numbers.

Science Signaling:

The Signal Transduction Knowledge Environment

RESEARCH ARTICLE: SIK1 Couples LKB1 to p53-Dependent Anoikis and Suppresses Metastasis. H. Cheng et al. Loss of SIK1 suppresses cell death resulting from loss of cell anchorage and promotes metastasis in the absence of primary tumors.

RESEARCH ARTICLE: Intracellular Delivery of a Cell-Penetrating SOCS1 That Targets IFN-γ Signaling. A. DiGiandomenico et al. The proinflammatory responses of cells to interferon-γ can be suppressed by a cell-penetrating, inhibitory protein.

EDITORIAL GUIDE: Signals to Neurodegeneration. W. Wong Investigation of signaling pathways that are perturbed in neurodegenerative diseases may improve treatment options.

RESEARCH ARTICLE: Inhibition of mTOR Signaling in Parkinson’s Disease Prevents L-DOPA–Induced Dyskinesia. E. Santini et al. PERSPECTIVE: Thwarting Dyskinesia by Targeting mTORC1. E. Klann Blocking mTORC1 activity may decrease the unwanted involuntary movements associated with L-DOPA treatment.


PODCAST

W. Wong and A. M. VanHook

A small G protein may limit the toxicity of mutant huntingtin to the brain.

Science Careers:

Free Career Resources for Scientists

Math Education Researchers in Demand

C. Wald In 2007, 40 percent of faculty positions in mathematics education went unfilled.

Tangled Webs: Careers in Network Science S. Carpenter The booming science of networks reveals hidden connections in just about everything.

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