Tracking Long-Distance Songbird Migration by Using Geolocators
B. J. M. Stutchbury et al.

Miniature recorders mounted on purple martins and wood thrushes allow mapping of migration routes between North America and the Neotropics.

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Observation of Unconventional Quantum Spin Textures in Topological Insulators
D. Hsieh et al.

Spin imaging reveals an insulating state that results from the entanglement of a macroscopic number of spins.

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Coherence Factors in a High-$T_c$ Cuprate Probed by Quasi-Particle Scattering Off Vortices
T. Hanaguri et al.

The momentum-dependent coherence factors in a high-temperature superconductor are revealed by introducing magnetic vortices.

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Polydnaviruses of Braconid Wasps Derive From an Ancestral Nudivirus
A. Bézier et al.

Virus-like particles used by parasitic wasps to manipulate host defenses are encoded by virus-related genes incorporated into the wasp genome.

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Effects of Genetic Perturbation on Seasonal Life History Plasticity
A. M. Wilczek et al.

Interactions among mutation, germination timing, and climate alter flowering patterns in Arabidopsis.

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The Hallucinogen $N,N$-Dimethyltryptamine (DMT) Is an Endogenous Sigma-1 Receptor Regulator
D. Fontanilla et al.

An endogenous compound is a ligand for a ubiquitously expressed receptor that binds many synthetic drugs and has been implicated in psychiatric disease.

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When Your Gain Is My Pain and Your Pain Is My Gain: Neural Correlates of Envy and Schadenfreude
H. Takahashi et al.

Envy is strongest against those with similar attributes, and the most joy is gained from the pain of those envied the most.

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The Orphan G Protein–Coupled Receptor 3 Modulates Amyloid-Beta Peptide Generation in Neurons
A. Thathiah et al.

A neuronal G protein–coupled receptor can stimulate the generation of the Aβ peptide implicated in Alzheimer’s disease.

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Differences in Early Gesture Explain SES Disparities in Child Vocabulary Size at School Entry
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Pre-verbal communication through gestures can improve a child’s vocabulary.

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RESEARCH ARTICLE: Brx Mediates the Response of Lymphocytes to Osmotic Stress Through the Activation of NFAT5

T. Kino et al.
The guanine nucleotide exchange factor Brx is essential for osmotic stress-mediated expression of nfat5 in lymphocytes.

MEETING REPORT: Emerging Roles of NAD+ and Its Metabolites in Cell Signaling

F. Koch-Nolte et al.
Scientists discussed the molecular aspects of NAD+ metabolism and signaling at a conference in Hamburg, Germany.

NETWATCH: Simmune Project

Build models, run simulations, and explore the dynamics of signaling pathways; in Modeling Tools.

NETWATCH: American Physiological Society Archive

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A. C. Palmenberg et al.

Rhinoviruses, which are a common cause of colds, fall into three or possibly four major clades and can undergo strain recombination.

10.1126/science.1166557

The Dynamic Control of Kiss-And-Run and Vesicular Reuse Probed with Single Nanoparticles

Q. Zhang et al.

A transient form of vesicle fusion that allows vesicle reuse is more prevalent early during synaptic response to a train of stimuli.

10.1126/science.1167373

Genome-Wide Analysis in Vivo of Translation with Nucleotide Resolution Using Ribosome Profiling

N. T. Ingolia et al.

Profiling the position of ribosomes on messenger RNA allows rapid, high-precision investigation of cellular protein translation.

10.1126/science.1168978

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B. Y. Ahn et al.

Colloidal silver particles can be formed into flexible electrodes of arbitrary shape in three dimensions.

10.1126/science.1168375

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Comment on “Dynamic Shifts of Limited Working Memory Resources in Human Vision”

N. Cowan and J. N. Rouder

full text at www.sciencemag.org/cgi/content/full/323/5916/877c

Response to Comment on “Dynamic Shifts of Limited Working Memory Resources in Human Vision”

P. M. Bays and M. Husain

full text at www.sciencemag.org/cgi/content/full/323/5916/877d

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