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www.sciencexpress.org

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10.1126/science.1153529

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Direct Observation of Hierarchical Folding in Single Riboswitch Aptamers

W. J. Greenleaf et al.

Optical trapping reveals that activation by adenine stabilizes the weakest helix in a riboswitch, after which secondary and tertiary structures are formed sequentially.

10.1126/science.1151298

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Mutations in the Pericentrin (PCNT) Gene Cause Primordial Dwarfism

A. Rauch et al.

In humans, an inherited condition with small brain size and near-normal intelligence is caused by mutations that disrupt chromosome separation during cell division.

10.1126/science.1151174

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J. M. Asara and M. H. Schweitzer

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J. H. Malone and P. Michalak

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Reduced North Atlantic Deep Water Coeval with the Glacial Lake Agassiz Freshwater Outburst

H. F. Kleiven et al.

Data on deep water formation in the North Atlantic indicate that the sudden draining of a huge glacial lake south of Hudson Bay led to dramatic cooling 8200 years ago.

GENETICS

The Physcomitrella Genome Reveals Evolutionary Insights into the Conquest of Land by Plants

S. A. Rensing et al.

Comparison of the moss genome sequence with those of other plants reveals hallmarks of colonization of land, including genes to manage terrestrial stresses such as dehydration.

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Polymorphic Y Chromosomes Harbor Cryptic Variation with Manifold Functional Consequences B. Lemos, L. O. Araripe, D. L. Hartl Unexpectedly, the Y chromosome exerts strong regulatory effects on X-linked and autosomal genes in Drosophila. **MOLECULAR BIOLOGY**

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Small Circuits for Large Tasks: High-Speed Decision-Making in Archerfish T. Schlegel and S. Schuster Archerfish shoot their insect prey with a stream of water and then use sensory information and just a few neurons to calculate how to retrieve their food.
Editor's Summary

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