Lake Boku at the Ounianga oasis in remote northeastern Chad, one of the few remaining bodies of water in the almost rainless Sahara. Still sustained by fossil groundwater dating from the humid past, it is doomed because of encroaching dunes. See page 765.

Photo: S. Kröpelin

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A brain region linked to emotion-processing systems is activated as humans weigh fairness to an individual against benefit for a group.

>> News story p. 734
10.1126/science.1153651

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Anticipatory Behavior Within Microbial Genetic Networks
I. Tagkopoulos, Y.-C. Liu, S. Tavazoie

Predictable sequences of environmental signals can be exploited by bacteria so that they learn to anticipate future metabolic needs and thereby gain a competitive edge.

10.1126/science.1154456

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An in Vivo Map of the Yeast Protein Interactome
K. Tarassov et al.

A method that identifies pairs of proteins that are 8 nanometers apart produces a map of interacting proteins in living yeast, finding known and previously unknown networks.

10.1126/science.1153878

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P. J. Applegate, T. V. Lowell, R. B. Alley

full text at www.sciencemag.org/cgi/content/full/320/5877/746d

Response to Comment on “Absence of Cooling in New Zealand and the Adjacent Ocean During the Younger Dryas Chronozone”
T. T. Barrows, S. J. Lehman, L. K. Fifield, P. De Deckker

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Carbon-14 dates on seaweed brought to Monte Verde, Chile, show that the site was used 14,000 years ago and that the earliest New World people consumed marine resources. >> News story p. 729

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Fossil human feces from an Oregon cave predate the Clovis culture by about 1000 years, and DNA from the feces marks the presence of Native Americans in North America.

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To protect itself from oxidative damage in bright light, photosystem II operates a tunable shunt that directs excess energy to a yellow accessory pigment that is abundant in corn.

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A. J. Hume et al.
A human cytomegaviruses protein takes control of the host cell cycle by mimicking a cell cycle kinase that phosphorylates and inactivates a tumor suppressor.

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Adaptive Phenotypic Plasticity in Response to Climate Change in a Wild Bird Population
A. Charmanter et al.
A 47-year study of great tits in Britain shows that the ability of individual birds to shift their breeding date has enabled the species to thrive as climate has changed.

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Temperature Sensing by an Olfactory Neuron in a Circuit Controlling Behavior of C. elegans
A. Kuhara et al.
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H. Lin et al.
A systematic, functional screen of extracellular proteins in yeast identified a previously unknown receptor-ligand pair: the cytokine interleukin-34 and its receptor.

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V. Prahlad, T. Cornelius, R. I. Morimoto
Activation of a heat-sensitive sensory neuron in the worm Caenorhabditis elegans unexpectedly triggers a heat-shock response throughout the animal.
Multiple models compete to explain T cell receptor activation.

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Experiments with metal chelators provide the best evidence for zinc as a regulator of synaptic activity.

FORUM: Open Forum on Cell Signaling
N. R. Gough and J. F. Foley
Read highlights from the Experimental Biology 2008 meeting.

An accurate source of career information?

Opportunities: Research Inc.
P. Fiske
It is useful to think of your research career as a business.

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L. Laursen
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