Backyard Nature's Direct Feed from

ScienceDaily Magazine

Plants and animals. Read current science news in biology, botany and zoology. Find everything from research on genetics and stem cells to the most recent stories on animal care, with images.

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Why mercury is more dangerous in oceans: Click here

Even though freshwater concentrations of mercury are far greater than those found in seawater, it's the saltwater fish like tuna, mackerel and shark that end up posing a more serious health threat to humans who eat them.

Technique enables precise control of protein activity in living cells: Click here

Researchers have developed a new technique called engineered allosteric regulation, which provides a new tool for scientists who study the interactions of proteins within living cells.

Scientists grow new lungs using 'skeletons' of old ones: Click here

Tissue engineers' progress toward growing new lungs for transplantation or research has long been frustrated by the problem of coaxing stem cells to develop into the varied cell types that populate different locations in the lung. Now, researchers have found a possible solution by seeding mouse embryonic stem cells into "acellular" rat lungs -- organs whose original cells have been destroyed, leaving behind empty, lung-shaped scaffolds of structural proteins.

Sea ice in the Arctic not recovering: Another critical minimum forecast: Click here

A critical minimum for Arctic sea ice can again be expected for late summer 2010, according to new projections by researchers in Germany.

Same types of cell respond differently to stimulus, study shows: Click here

Using new technology that allows scientists to monitor how individual cells react in the complex system of cell signaling, researchers have uncovered a much larger spectrum of differences between each cell than ever seen before.

Viscosity at the nanoscale: Intriguing 50-year-old puzzle solved: Click here

At a snail's pace – this is how proteins should move inside living cells where viscosity of environment exceeds the viscosity of water by a million times. However, proteins move not much slower than in water. While looking for a solution to this puzzle, scientists from Poland have discovered a new principle of physics.

Ascension Island 'extinct' parsley fern rediscovered: Click here

The rediscovery of a fern, long thought to be extinct, is part of a rescue effort to save the highly threatened, endemic plants of the tiny UK overseas territory of Ascension Island in the South Atlantic.

Bird flu: Preening spreads viruses in nature: Click here

Scientists discovered that the preen oil gland secretions, by which all aquatic birds make their feathers waterproof, support a natural mechanism that concentrates AIVs from water onto birds' bodies. Since waterbirds use to spread preen oil over their own (self-preening) or other birds' (allo-preening) plumage, it is easily understandable how these preening activities could facilitate the diffusion of the viruses in nature.

Chromosomal variations found in early passage female embryonic stem cells: Click here

Scientists have uncovered that variations in X chromosome inactivation take place in very early passages of female human embryonic stem cells lines, information that will play an important role in ensuring the safety of cells grown for therapeutic use and a discovery that also may have implications in the development of cancer.

Novel regulatory protein complex explains another protein's double life: Click here

Researchers have identified a novel regulatory protein complex in Drosophila that explains another protein's double life, and which likely plays an important role in mammals, too.

Ronin recruits protein 'allies' to sustain embryonic stem cell growth: Click here

Ronin, crucial to the self-renewal of embryonic stem cells, and a co-regulator called Hcf-1, binds to a small strand of DNA called a hyperconserved enhancer element to control a gene "program" that stimulates growth of the stem cells and may even play a role in cancer, according to new research.
