RESOURCES

Botanical Bounty

Botanists, ecologists, students, and even gardeners will find a bumper crop of information at PLANTS. The U.S. Department of Agriculture's online encyclopedia profiles some 43,000 species and varieties of native and introduced plants, emphasizing their role in soil conservation. Entries feature images and taxonomic information, and some include an exhaustive list of the plant's characteristics, from maximum height to flowering time to soil pH preference. Range maps usually break down distribution to the county level. Separate sections let you quickly find noxious invaders, endangered species, and wetland residents. The gallery is an eyeful, displaying more than 30,000 photos and drawings of species such as the wild sweet William (*Phlox maculata*; left), a native of the eastern and Midwestern states. >>
plants.usda.gov

WEB LOGS

More Than Skin Deep

For the real scoop on cosmetics and hair care, forget stylists—ask the scientists at The Beauty Brains. On this new blog, a pair of cosmetic chemists weigh product claims, answer reader questions, and highlight research that's germane to the beauty business. Although most of the answers aren't very technical, they usually touch on scientific issues, from the dangers of mixing hair-care products to the harmless mites that inhabit your hair follicles. For example, the question, "Can you fix split ends?" prompts a short discussion of hair structure. No matter what the shampoo ads assert, the site concludes, split ends are unfixable because hair isn't alive and can't heal. >>
thebeautybrains.blogspot.com

EDUCATION

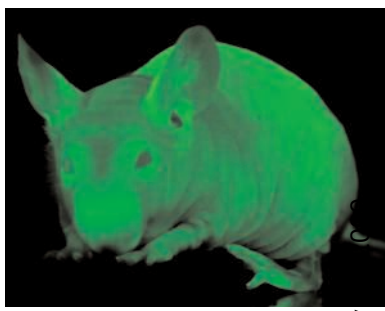
<< When Molds Attack

The fungus *Penicillium marneffei* (left) is a sinister cousin of the molds that make penicillin. On the loose in Southeast Asia, *P. marneffei* invades the skin, eyes, lungs, and other organs, often picking on HIV-infected patients. Doctors and researchers can brush up on pathologic fungi such as *P. marneffei* at Mycology Online, hosted by David Ellis of the University of Adelaide in Australia. After you pore over the descriptions of medically significant fungi, try your hand at the identification quiz. Browse the laboratory methods section to learn how to culture molds from skin swabs or mix a stain that delineates fungal filaments inside tissue. The site also features a gallery and lets you download 500 slides of fungi and their symptoms gathered by the eminent Australian mycologist Geraldine Kaminski. >>
www.mycology.adelaide.edu.au

EDUCATION

Lighting Up Life

To learn why biologists are all aglow about a luminous jellyfish molecule called green fluorescent protein (GFP), check out this brief primer from Marc Zimmer of Connecticut College in New London. By allowing scientists to track proteins and cells, GFP has become a lab workhorse. The site, which supplements Zimmer's book on the topic, describes the molecule's structure, introduces the researchers who isolated GFP and pioneered its use, and surveys its applications.

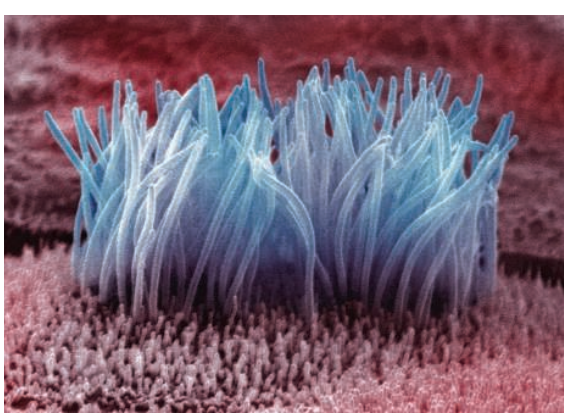


This GFP-making mouse (above) allows researchers to observe interactions between tumors and the surrounding tissue. >>
www.conncoll.edu/ccacad/zimmer/GFP-ww/GFP-1.htm

DATABASE

Powered by Cilia

Fluttering cilia speed a paramecium across a microscope slide, but the hairlike filaments are more than cellular equivalents of outboard motors. New research suggests that cilia detect fluid movement in the kidney, tune in molecular signals that help orchestrate embryonic development, and perform other stationary tasks (*Science*, 14 October 2005, p. 216). The new Cilia Proteome site from Johns Hopkins University in Baltimore, Maryland, is sweeping up data on all proteins found in cilia and basal bodies, the sockets that hold the filaments. You can browse the known human proteins or call up comparable molecules from model organisms such as the mouse and fruit fly. >> www.ciliaproteome.org



Send site suggestions to >>
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Archive: www.sciencemag.org/netwatch

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