

EXHIBITS

Breaking Into the Men's Club

Today, women earn only about 13% of the physics Ph.D.s awarded in the United States—a percentage that was even smaller at the beginning of the 20th century. But as this site shows, not every eminent physicist from 50 or 100 years ago was named Albert, Robert, or Hans. The exhibit from the University of California, Los Angeles, profiles more than 80 women who excelled in the field from 1900 to 1976. The international roster of scientists includes Dorothy Crowfoot Hodgkin (1910–94; above), who won the 1964 Nobel Prize in chemistry for her work on x-ray crystallography, and S. Jocelyn Bell Burnell (1943–; see *Science*, 23 April, p. 489), who identified the first pulsars. The brief bios summarize each researcher's discoveries and list career highlights and key papers.

cwp.library.ucla.edu



RESOURCES

The Whole Grains Catalog

Sequencing an organism's genome not only provides insight into the organization and function of its genes, but the data can help researchers plumb the genomes of its close relatives. That's the premise behind Gramene, a database that allows scientists to compare genetic information for nine species of agriculturally important grasses. Visitors can use the completed rice genome as a guide for analyzing species whose genomes aren't finished, such as wheat, millet, sorghum, and oats. The site's tools allow users to construct gene maps and compare them across species and to search for particular DNA sequences.

www.gramene.org

DATABASE

Trees Before Time

The flowering plants claim most of the beauty prizes, but the gymnosperms—the group that includes pines, firs, cycads, and the ginkgo—get the award for persistence. Gymnosperms were standing tall more than 100 million years before the first flower blossomed. This database from Christopher Earle, a consulting ecologist in the Seattle, Washington, area, offers an up-to-date synopsis of the group's taxonomy. The species accounts cover more than 500 modern kinds of gymnosperms, from *Welwitschia mirabilis*, a droopy-leafed African desert dweller that might live for more than 500 years, to the stately Douglas fir of western North America (*Pseudotsuga menziesii*; above), one of the world's largest trees.

home.earthlink.net/~earlecj

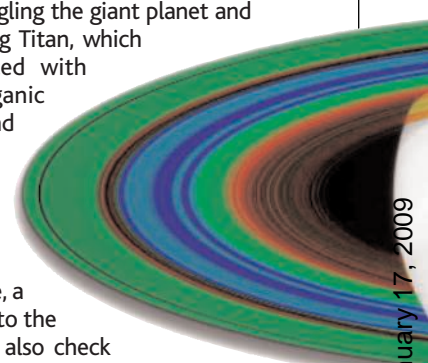


IMAGES

Dispatch From Saturn

The Cassini space probe sidled up to Saturn this summer and will spend the next 4 years ogling the giant planet and some of its moons, including Titan, which boasts an atmosphere laced with methane and other organic compounds (see p. 952). Find out what the spacecraft has revealed so far at the NASA Web presentation "A Ring-Side View of Saturn." For example, Cassini took measurements of Saturn's magnetosphere, a cloak of charged particles similar to the one that shrouds Earth. You can also check out some of the voyage's best images. Red in this depiction of the planet's famous rings (above) shows "warm" zones, which reach a toasty -163° .

www.jpl.nasa.gov/multimedia/cassini-essay



DATABASE

Dealing Gene Data

Shuffling through GeneCards from the Weizmann Institute of Science in Israel can help you discover the latest information on human genes and proteins and the diseases that result when they go awry. The site's deck includes nearly 39,000 cards—seen as Web pages—profiling all of the human genes that have received official names, along with many others. For example, if you draw the card for *BRCA1*, which is mutated in some kinds of inherited breast cancer, you will get data on the gene's location and sequence. The card also summarizes information on the protein's structure and actions, drawing information from sites such as SwissProt and the Gene Ontology Consortium.

In addition, you can perform broader searches to identify all the genes that reside on a chromosome or that participate in a particular disease or process, such as cellular suicide, known as apoptosis. The cards also link to other Weizmann Institute databases such as GeneNote, which features gene-expression results from healthy tissues, and GeneTide, which can help pin down new genes. The site is free for academic researchers.

bioinfo.weizmann.ac.il/cards/index.shtml

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