

DATABASE

Blueprint for Bones



From the shape of our cheekbones to the kinks in our toes, genes shape our skeletons. The Skeletal Gene Database at the National Institutes of Health holds information on some 200 genes involved in normal and abnormal bone and cartilage formation in mice and humans. You can look up each gene's function and role in disease in a table that also links to genomic databases and PubMed. Or in a new section, search a catalog of 80,000 gene fragments, known as ESTs, by gene symbol, chromosome location, or GenBank number. The list ranges from the *BMP* genes, which help bone and cartilage form, to *VDR*, which plays a role in vitamin D metabolism and can contribute to rickets.

sgd.nia.nih.gov

EXHIBITS

Making Modern Medicine

Profiles in Science uses pages from lab notebooks, letters, audiotapes, diary entries, period photographs, and other documents to tell the stories of the 20th century's top biomedical researchers. The latest addition to this evolving site from the U.S. National Library of Medicine is physiologist Donald Fredrickson (1924–2002), former director of the National Institutes of Health, who refined our understanding of the foul-ups in fat metabolism that can spawn heart disease. He joins eight other profiled scientists, including Oswald Avery, whose clever experiments with bacteria confirmed that DNA is the genetic material; and Barbara McClintock, who showed that genes jump from place to place on chromosomes.

profiles.nlm.nih.gov

IMAGES

Volcano Voyeurism

Watch live eruptions at this site from the U.S. Geological Survey, which links to more than 40 Webcams that are trained on active volcanoes around the world. Check up on Mount St. Helens, Japan's Mount Fuji, New Zealand's Mount Ruapehu, or Italy's Mount Etna. The unruly Etna's latest outburst began on 27 October and featured tremors, spewing ash, and spectacular fire fountains (right).

vulcan.wr.usgs.gov/Photo/volcano_cams.html



RESOURCES

Population Center

Hunting for the latest on contraceptive research? Need to know how urbanization has affected health in poor nations? Plunge into POPLINE, an eclectic bibliography on population and reproductive health from Johns Hopkins University in Baltimore, Maryland. Geared for policy-makers and health care workers, the more than 290,000 abstracts focus on important topics for developing countries, such as demography, family-planning technologies and policies, sexually transmitted diseases, and the impact of human population growth on ecosystems. POPLINE's entries are updated twice monthly and hail from technical papers and books, dissertations, newspaper articles, government reports, court records, and other sources. Although the site sells full-text copies of most documents, researchers in developing countries can obtain them for free.

db.jhuccp.org/popinform



LINKS

Physics Untangled

Aiming to spare physics-minded Net surfers from information overload, Physics.org is a guide to Web sites useful for experts and novices alike. Whether you're an expert on superstrings, a student desperate for a concise taxonomy of the fundamental particles, or an amateur who just wants to build a better paper

airplane, Physics.org can help. The site asks you to type in a question and indicate your level of physics know-how; it then provides an annotated list of sites. Hosted by the Institute of Physics in the United Kingdom, Physics.org also includes a nifty animated education section on physics in everyday life. As you explore a virtual neighborhood, pop-up boxes briefly explain the principles behind familiar inventions and activities, from how laser printers create text to how soccer players make their kicks curve. For practicing physicists who have forgotten that key value or equation, the site also links to a page that lists more than 600 physical constants and 450 equations.

www.physics.org

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