



DATABASE

Nuclear Stockpile

Whether you're investigating the potential for nuclear terrorism or probing early research on radioactivity, check out the Alsos Digital Library for Nuclear Issues at Washington and Lee University in Lexington, Virginia. The site's name comes from an American World War II mission to gather information about Germany's atomic bomb program. Its centerpiece is an annotated bibliography of nuclear-themed books, memoirs, reports, TV programs, films, and Web sites. Entries plumb current and historical issues such as the decision to drop atomic bombs on Japan, the perils of nuclear proliferation, and atomic accidents. The scientific section offers background on subjects such as the mechanics of fission and fusion and the effects of radiation on humans. You can also dig into a trove of biographical sources on scientists such as Henri Becquerel, the discoverer of radioactivity, and J. Robert Oppenheimer, the top scientist on the Manhattan Project.

alsos.wlu.edu

TOOLS

A Cut Above

Restriction enzymes are molecular shears that sever DNA strands at a particular sequence of bases. Molecular biologists can find out where a certain enzyme will slice a specific length of DNA by using RestrictionMapper. Enter a DNA sequence and choose from among a list of several hundred commercially available restriction enzymes. The program tells you which enzymes will snip the strand and where, and then it supplies the sequences of the fragments. Also check out the links to other free molecular biology software, including programs for sequence alignment and gene annotation.

www.restrictionmapper.org

NETWATCH

edited by MITCH LESLIE

EXHIBITS

Putting Polio in the Past

Young polio victims gather outside a New Delhi rehabilitation clinic in this photo by Sebastião Salgado. The well-known photographer's poignant images anchor End of Polio, an online exhibit from the World Health Organization and other sponsors. The site describes the worldwide vaccination campaign that has nearly extinguished poliovirus, which has killed and paralyzed millions.

When the effort began in 1988, there were more than



350,000 cases of polio a year, compared with only 500 in 2001. Pursuing the virus to its lairs required impressive logistics. In 1999, for example, the program delivered 2 billion doses of a vaccine that has to remain chilled to remote areas that lack electricity and are often wracked by civil war. In the chaotic southern Sudan, the vaccine stayed frosty thanks in part to a "cold chain" of 230 solar-powered refrigerators spread across the nearly roadless region. Salgado's photos chronicle such heroic efforts. The site also describes the challenges of stamping out polio in its last strongholds in 10 Asian and African countries. Public health leaders hope to certify these places as disease-free by 2005 if enough money can be raised: The site invites visitors to donate.

www.endofpolio.org

EDUCATION

Games People—and Animals—Play

Research on game theory—the idea that social and economic interactions are contests in which players pursue particular strategies—has yielded insights into everything from the evolution of cooperation to consumer preferences. Aimed at teachers and college and grad school students, Game Theory .net is a mixture of serious learning resources and fun stuff compiled by management professor Mike Shor of Vanderbilt University in Nashville, Tennessee. Teachers will find a bounty of useful material, including homework problems, quizzes and tests, and lecture notes ranging from basic courses to advanced seminars on choice theory. A collection of Java applets lets you try out different strategies in games such as the prisoner's dilemma, in which players have to decide whether to inform on their accomplice in crime or stonewall the authorities.

www.gametheory.net

IMAGES

Wild Photo Album

Looking for a winning shot of a copperhead, an ocelot (right), or a bald eagle to pep up a talk or add panache to a paper? Try searching the National Image Library, a nature gallery from the U.S. Fish and Wildlife Service. You can download a plethora of free medium- and high-resolution photos of vertebrates, invertebrates, plants, and landscapes, mainly from North America.

images.fws.gov

