

moved). This can save the effort of performing several searches in series. But meta-engines tend to be slower and tend to return a maximum of about only 100 results.

Because each engine has its own quirks, it is worth reading the search tips usually listed on the home page. Armed with a few search engines and perseverance, users should be able to find relevant documents in what is fast becoming the world's largest library. Some top search engines are listed in the accompanying Site Finder section, and links to additional search sites can be found at www.MedsiteNavigator.com/techsight/nettips_3.html

—Richard Peters and Robert Sikorski

Digital Mailbox:
www.sciencemag.org/dmail.cgi?53284

Search Engines

HotBot
www.hotbot.com

From the creators of *Wired*, this is a very fast search engine with an index of 53 million Web documents.

SITE FINDER

PC Magazine selected it as their number one choice for its advanced search features. Both the Web and Usenet groups can be searched, and the query syntax allows exact matches, near matches, or boolean expressions. The search can be narrowed to specific geographic locations, calendar dates, or even media types (image, audio, java, and so on). Users can customize the interface and save the settings for future use.

Lycos
www.lycos.com

Lycos (Greek for spider) is a hybrid between a search engine (100 million pages) and a directory. LycosPro is now available for advanced searching with Java-based Power Panel relevancy controls. This engine, though, does not offer the advanced search options of something like HotBot. On the other hand, Lycos offers a human-edited directory that is divided into 18 categories, including science, education, and health. It features the top 5% Web sites reviewed by a team working for Lycos, with 100 new reviews added per week.

AltaVista
altavista.digital.com

Designed as a research project at Digital Equipment to showcase the power of their Alpha Web server, it is one of the fastest engines. It houses an index of more than 30 million pages, and lets you search the Web and Usenet groups in several languages, from Chinese to Swedish. The advanced search allows boolean operators such as "and," "or," "not," and "near" (which en-

sures that two words are within 10 words of each other).



InfoSeek
www.infoseek.com

This search engine (with 50 million documents) now has four variations: Ultrasmart offers bare bones functionality for searching the Web; Ultraseek offers advanced features such as whole-sentence searching, and word variant ("mouse" will also return documents containing "mice"), case-sensitive, and field-based searching (searches a specific field such as Title or URL on Web pages); Newscenter features the latest headlines organized by category; and Smartinfo is a collection of tools that let you search for e-mail addresses, stock quotes, phone numbers, and company profiles.

Excite
www.excite.com

Another hybrid search engine, Excite features an index of 50 million Web pages and a directory of 150,000 sites organized into 14 channels including careers and education, and health. You can also look up e-mail addresses, newsgroups, stocks, and the weather. The Powersearch option of Excite lets you search for words or phrases, but pales in comparison to those offered by the other engines. As a bonus, however, the service has just introduced free Web-based e-mail to all its users.

Metacrawler
www.metacrawler.com

This metasearch engine does not maintain a local database, but, rather, it queries in parallel those of Lycos, Infoseek, WebCrawler, Excite, AltaVista, and Yahoo! with a customized search window. Powersearch allows searches limited to a geographic location and to a word or a phrase. Although such a metaengine will ensure that you have pulled out the most popular documents from the engines and directories queried, it does not offer advanced search features.

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www.sciencemag.org/dmail.cgi?53283

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Tech.Sight is published in the third issue of each month, and appears in Science Online at www.sciencemag.org. Contributing editors: Robert Sikorski, National Cancer Institute, Bethesda, MD; Richard Peters, Harvard Medical School, Boston, MA. The editors welcome your comments by e-mail to techsight@aaas.org. Specific comments and feedback should be routed via the Web with the Digital Mailbox URLs at the end of each item.

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