15 - INTERNET SEARCH ENGINES, PORTALS, BOOKSTORES

As the PubMed search engine is to the MED-LINE database, so Yahoo, HotBot, and other search engines to the entire Internet, which can be seen as one vast database of web-pages. Pub-Med works only within the MEDLINE database

DoctorInternet

and only on the computers of the National Library of Medicine. Although a person accesses PubMed through the Internet, that program does not search the Internet. That is performed, in various ways, by "Internet search engines". While MEDLINE contains some 11 million records, the Internet, as a whole, contains over 1 billion documents (i.e., web pages) and that is expanding exponentially each year. Unlike MEDLINE, where all of the records pertain to biology and medicine, only a small segment of the Internet relates to those subjects. Thus, it becomes critically important to structure one's search in as precise a manner as possible in order to avoid retrieving a deluge of irrelevant information. In all of the search engines, you can use the basic Boolean operators which were discussed in the previous section; and each search engine will have a sector entitled something like "advanced search features" which explains the particular routines for that program.

15(A) - YAHOO

[**http://www.yahoo.com**]

Yahoo, was the first search engine that was designed for the Internet; and, probably, it continues to be the most popular. Thus, we will discuss this site in greater detail than the others. However, the essential routines are

common to all. Created in 1994, by David Filo and Jerry Yang, Stanford students, it is predominantly a directory of links to Internet sites, with the links organized into subject categories. In 1995, it became associated with Netscape, the Internet browser; and according to their company history, it is housed on the computer of Netscape. From the main menu, you have three options: 1) simply enter your search term in the **query box**, 2) use the **directory of links**, or 3) proceed to **advanced search** functions.

These are simply three different avenues for retrieving the same information. In the following, we will explore each to give you a feel for how these systems function. Keep in mind that when using Yahoo, the scope of your search is restricted to the selection of the organizers who created the directory and, in effect, you are not really searching the web. Rather, you are searching the inventory of links which have been organized by Yahoo; and from those, you can launch out into the Internet.

Option 1 - If you had entered your search term in the **query box** and sent it, then, for our term "**hypertension**", you are given one **Category** within which Yahoo indexes **53 sites**; and those can be seen by scrolling.

Inside Yahoo! Matches

Health: Find information about Hypertension on Yahoo! Health

Yahoo! Category Matches (1 - 1 of 1)

Health > Diseases and Conditions
- **Hypertension**

Yahoo! Site Matches (1 - 19 of 53)

Health > Diseases and Conditions > Kidney Diseases
- **Hypertension**, Dialysis, and Clinical Nephrology - links to medical products, and drugs pertaining and papers.

Health > Diseases and Conditions > **Hypertension**
- **Hypertension** Network, Inc. - HTN links patients and physicians with a com high blood pressure.

Option 2 - Using the "advanced search" options, you can delimite your search variously. One of special note is the "**Usenet**" search, which will take your term and show communications from chat groups.

HYPERTENSION | Search | help
⊙ Yahoo! ○ Usenet

The options below apply only to Yahoo Directory searches:

Select a search method:
- ⊙ Intelligent default
- ○ An exact phrase match
- ○ Matches on all words (AND)
- ○ Matches on any word (OR)

Select a search area:
- ⊙ Yahoo Categories
- ○ Web Sites

Find only new listings added during the past [4 years ▼]

170

Option 3 - If you had selected the "Health" category on the homepage, you would have been directed to a sub-directory of **different categories**.

By selecting a **particular category** and then by designating "**just this category**" and redoing your search, you can restrict the retrieval for you term to that particular category.
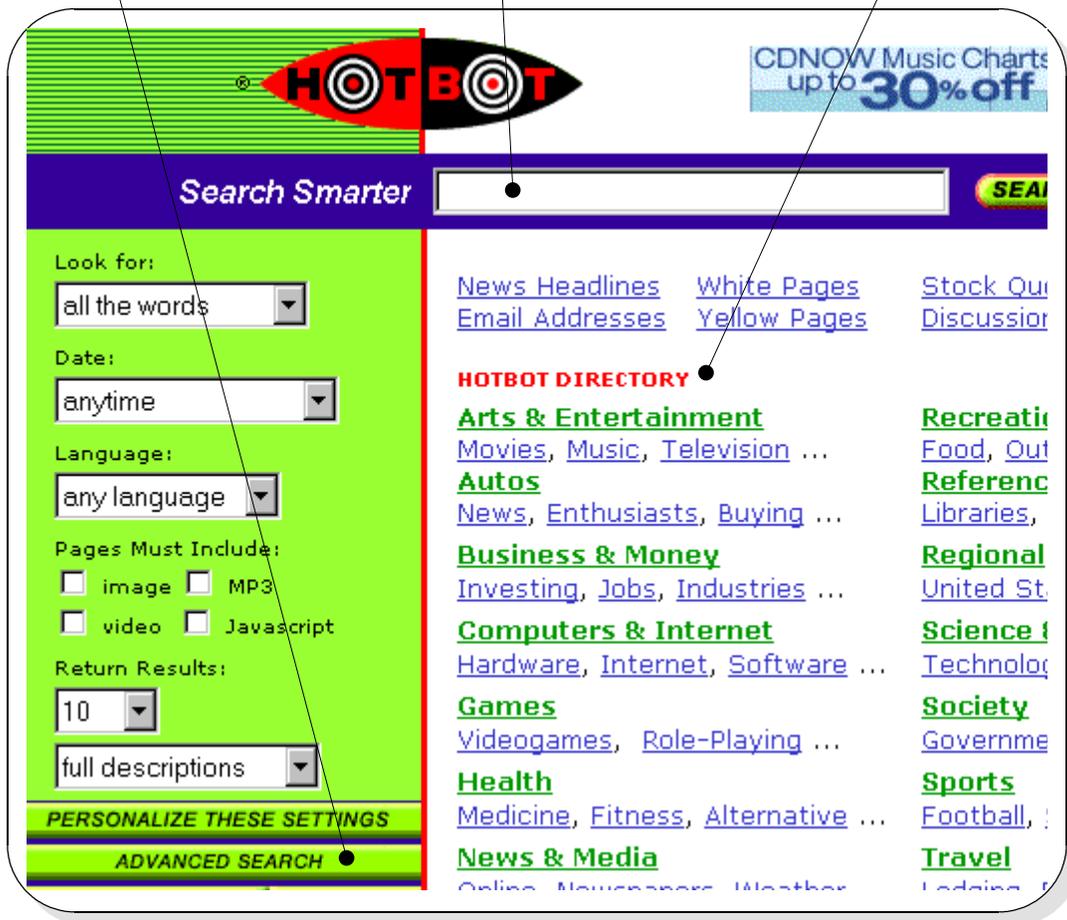
15(B) HOTBOT [**http://hotbot.lycos.com**] HOTBOT, because it builds its data bank by routinely roaming the Internet to collect links to web-sites (presently over 100 million), would be considered an Internet search engine in addition to being an Internet Directory. Originally created as "Inktome" at the University of California, Berkeley, it is now privatized. The structure is similar, with a **query entry box**, a preformatted **directory of links**, and **advanced search** structuring. The breadth of retrieval is much vaster than Yahoo.

15(C) OTHER SEARCH ENGINES AND PORTALS. There are many other Internet search engines; and there is great competition and rapid evolution among them. Only a few others will be identified here, for no other reason, really, than to demonstrate the diversity. Each has different characteristics; and that which will be initially useful for a person may become inadequate as one becomes more skilled.
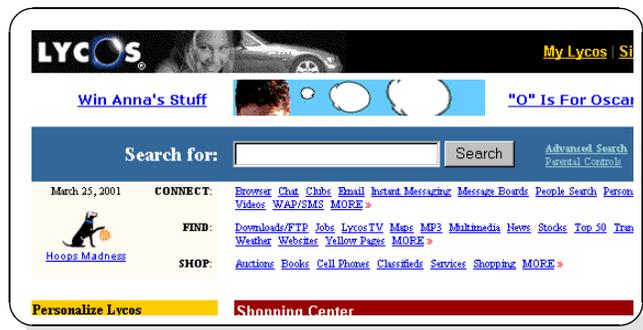
ALTAVISTA

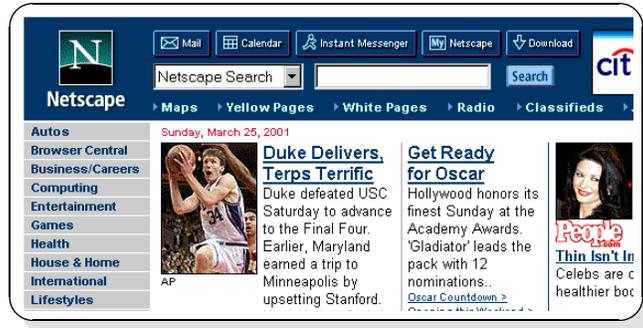[**http://www.altavista.com**]

LYCOS

[**http://www.lycos.com**]

GOOGLE

[**http://www.google.com**]

Netscape

[**http://www.netscape.com**]

MSN Web Site

[**http://www.msn.com**]
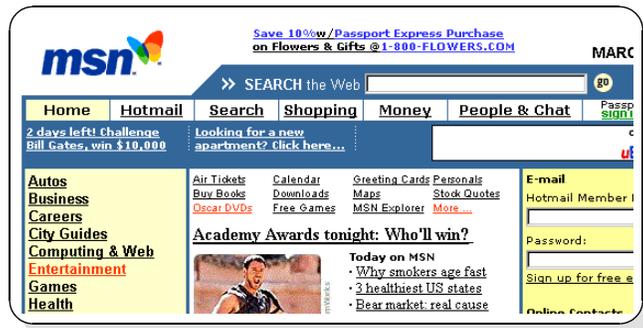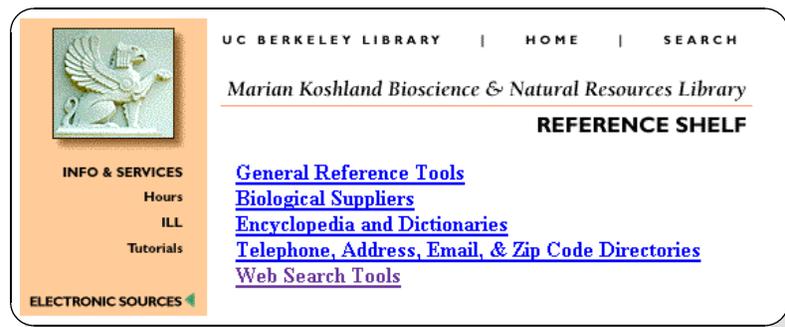
Bio-Sciences Library - UCB. A variety of Web Search Tools are offered together with instructions and tutorials.

[**http://www.lib.berkeley.edu/BIOS/elec2.html#search**]

15(D) SITES FOR HEALTH AND MEDICAL BOOKS

AMAZON.COM

[http://www.amazon.com]

BARNES & NOBLE

[http://www.barnesandnoble.com]

BORDERS

[http://www.borders.com]