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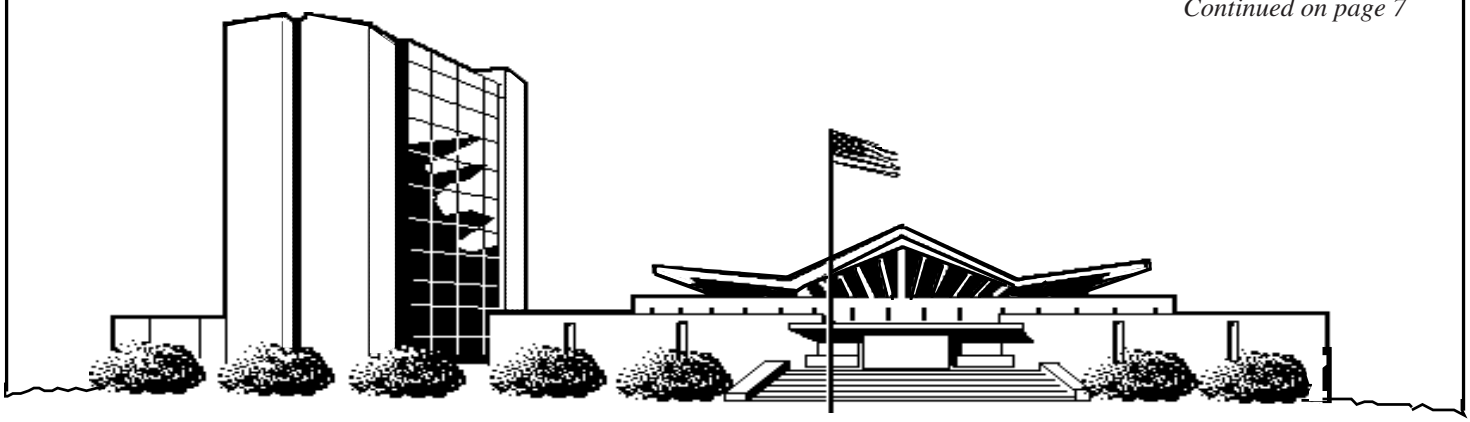
Introducing Gopher

Imagine a world in which computers storing a wide variety of information are spread throughout the nation and the globe. Imagine that all of these computers are connected together by a network and that a user connected to this network can access any of these computers. Imagine facilities that assist you to search and retrieve public documents of interest to you, regardless of where they exist.

The network is called the Internet, and consists of tens of thousands of computers and networks linked throughout the world. The facilities are called gophers. If you have Internet access and a terminal or workstation, you can access gopher sites throughout the Internet. Your local hardware, software, and the chosen method for accessing a gopher will determine which gopher features will be available to you. Welcome to the world of information at your fingertips.

The name "gopher" is a pun, combining the concept of "going fer" things with its development at the University of Minnesota, home of the "Golden Gophers." Originally conceived as a distributed document search and retrieval system, gophers now boast databases allowing users to search for documents that contain certain words or phrases; browsing menus of documents; and many

Continued on page 7



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The NLM Technical Bulletin is an administrative document sent to formal members of NLM's MEDLARS Online Network.

ELHILL® COMPUTER

MEDLARS® DATABASE	TOTAL RECORDS	DATES COVERED	DATE LAST UPDATED	LATEST UPDATE TAG
AIDSDRUGS	205		12 APR 94	9403(EM)
AIDSLINE®**	96,342	JAN 80-JUN 94	16 APR 94	9406(EM)
AIDSTRIALS	580		12 APR 94	9404(EM)
AVLINE®	26,855	THRU APR 94	14 APR 94	
BIOETHICSLINE®	41,649	JAN 73-APR 94	31 MAR 94	9404(EM)
BIOTECHSEEK	4,493	JAN 90-MAY 94	02 APR 94	9405(EM)
CANCERLIT®	1,027,128	JAN 63-APR 94	02 APR 94	9404(EM)
CATLINE®	728,005	THRU APR 94	14 APR 94	
CHEMID	267,994		06 FEB 93	
CHEMLINE®	1,258,634		10 MAR 94	9402(EM)
DENTALPROJ™	786		02 MAY 92	
DIRLINE®	15,385		17 FEB 94	
DOCUSER®	14,032		09 APR 94	
HEALTH	732,694	JAN 75-MAY 94	02 APR 94	9405(EM)
HISTLINE®	114,772		16 APR 94	9404(EM)
HSTAR	1,349,713	1985-JUN 94	16 APR 94	9406(EM)
MEDLINE®*	1,123,818	JAN 91-JUN 94	16 APR 94	9406(EM)
MED89	743,884	JAN 89-DEC 90	26 MAR 94	
MED85	1,319,067	JAN 85-DEC 88	26 MAR 94	
MED80	1,388,746	JAN 80-DEC 84	16 APR 93	
MED75	1,278,801	JAN 75-DEC 79	19 FEB 94	
MED66	1,986,408	JAN 66-DEC 74	09 APR 94	
MESH VOCABULARY FILE®	94,319	1994	14 APR 94	
NAME AUTHORITY FILE®	547,892		09 APR 94	
PDQ®		THRU APR 94	01 APR 94	
POPLINE®	206,854	1970-MAR 94	12 MAR 94	9403(EM)
SDILINE®	30,794	MAY 94	24 MAR 94	9405(EM)
SERLINE®	83,567	THRU MAR 94	05 APR 94	
TOXLINE®	1,251,777	1981-1994	15 JAN 94	9401(EM)
TOXLINE65	705,394	PRE 1965-1980	03 APR 93	
TOXLIT®	1,236,728	1981-1994	15 JAN 94	9401(EM)
TOXLIT65	586,405	1965-1980	01 SEP 87	

*N.B. FILE IS UPDATED WEEKLY; THIS IS PART 3 OF 5.
**N.B. FILE IS UPDATED WEEKLY; THIS IS PART 3 OF 4.

TOXNET® COMPUTER

CCRIS	5,517	07 MAR 94	
DART™	19,962	14 MAR 94	
EMIC	7,401	14 MAR 94	
EMICBACK	75,886	08 SEP 92	
ETICBACK	49,591	08 JUL 90	
GENE-TOX	2,957	23 DEC 93	
HSDB®	4,437	20 MAR 94	
IRIS	661	01 MAR 94	
RTECS®	122,921	27 FEB 94	
TRI87	80,136	18 MAR 94	
TRI88	87,151	18 MAR 94	
TRI89	86,812	27 MAR 94	
TRI 90	85,711	27 MAR 94	
TRI91	83,876	17 MAR 94	
TRI92	81,075	16 MAR 94	
TRIFACTS	326	10 APR 92	

Technical Notes

1994 NLM Meetings at MLA

The NLM Update at the Annual Meeting of the Medical Library Association (MLA) in San Antonio, TX will be held on Monday, May 16, in the Convention Center Theater from 10:30 a.m. until Noon.

The NLM Online Users' Meeting will be a "Lunch and Learn" session on Monday, May 16, from 12:30 to 1:15 p.m. in Fiesta Rooms A & B of the Convention Center.

An NLM Fixed-Fee User Group meeting will be held at MLA on Tuesday, May 17, from 2:00 to 3:30 p.m. in Salon E of the Marriott Riverwalk. Current subscribers to the MEDLARS Fixed-Fee Access Programs will be there to discuss their implementations, and interested persons are invited to attend. A SERHOLD meeting will also be held on Tuesday, May 17, from 2:00 to 3:30 p.m. The SERHOLD meeting will be held in Salon B of the Marriott Riverwalk.

MLA attendees are invited to "mosey on over" to Island G in the MLA Exhibit Hall where people can visit with NLM and NN/LM staff and see various NLM products and services. The exhibit will be focusing on:

- NLM and increased information access for librarians
- NLM and the Internet
- NLM and High Performance Computing and Communications (HPCC)

Also featured at the booth will be: NLM's new health services research databases (HSTAR and HSRPROJ); full text searching of clinical practice guidelines; NLM free AIDS and DIRLINE databases; online updating of SERHOLD; NLM Locator; NLM's gopher; Mosaic applications being built by NLM (such as Mosaic Coach Metathesaurus Browser and the HyperDoc hypertext/ multimedia service, which includes online images from the History of Medicine and more); the NLM History of Medicine Videodisc; HPCC grants; segments of the NLM satellite broadcast; and much more. "Y'all come!"

New Clinical Alert Available Online

On February 22, 1994, the Clinical Alert entitled: Important Therapeutic Information on the Benefit of Zidovudine (AZT) for the Prevention of the Transmission of HIV from Mother to Infant (from the National Institute of Allergy and Infectious Diseases) became available in ELHILL. This is the tenth Clinical Alert placed in the ALERT file. To retrieve the full text of this alert, type **FILE ALERT** at any USER: prompt, then type **alert (tf)** at the next USER: prompt. The command PRINT 1 DL will print out the full record for this current Alert. The latest alert always prints out first. For more detailed instructions and examples for searching in FILE ALERT, see the article on pages 17-26 of the January-February 1992 *Technical Bulletin*. Announcements of new Clinical Alerts and instructions for retrieving the full text of new NIH Clinical Alert are also in the NEWS portions of the ELHILL and TOXNET databases for thirty days after their announcement.

NLM makes new Clinical Alerts available in three ways in addition to the ALERT file: 1) electronically via the Grateful Med Bulletin Board and the NLM anonymous ftp server; 2) by faxing copies to NN/LM Regional Medical Libraries and NN/LM Resource Libraries; and 3) by mailing copies to NN/LM member libraries. To obtain the alert electronically from the NLM anonymous ftp server, do an anonymous ftp to nlmpubs.nlm.nih.gov. Once connected, change directory to nlmpubs/alert.

MEDLINE and Backfiles Database Postings in the MeSH File

The MEDLINE and Backfiles Database Postings in the MeSH file were updated to reflect the reconfigured files in December 1993. The Backfiles Database Postings elements give the number of postings for each MeSH descriptor and subheading for the Backfiles as of December 13, 1993, which equates to data through the 9401 (EM) update for the MEDLINE file. Because the Backfiles postings are not updated during the year, the numbers continue to reflect the counts as of December 13, 1993 for the closed Backfiles and through the 9401 Entry Month (EM) of data for the MEDLINE file. MEDLINE postings reflected in the MeSH file serve as an estimate, not as an exact count, because NLM adds citations weekly to MEDLINE. Counts are given for

both Index Medicus (IM) postings (starred number) and total postings (unstarred number) for MeSH headings in the databases. For MeSH subheading records, only total counts are given.

Following are examples of MEDLINE and Backfiles postings as they appear with the records for PAIN (MH) or Drug Therapy (SH) in the MeSH file. MED, M89, M85, M75 and M66 are short aliases that represent the file names for MEDLINE, MED89, MED85, MED75, and MED66. (For further explanation of the MeSH file and its record elements, type EXPLAIN MeSH online or consult Chapter 6 of the Online Services Reference Manual).

MH - Pain

MED - 5113
MED - *3218
M89 - 3791
M89 - *2483
M85 - 7391
M85 - *4413
M80 - 7176
M80 - *3915
M75 - 5410
M75 - *2485
M66 - 8063
M66 - *2947

SH - drug therapy

MED - 74822
M89 - 56954
M85 - 98731
M80 - 103365
M75 - 87627
M66 - 144440

New Online EXPLAIN Added

A new online EXPLAIN has been added to ELHILL. Enter file ALERT and type EXPLAIN $COMMANDS for brief explanations of new commands which have been added to the system for 1994. Users are reminded that by viewing EXPLAINs in the ALERT file, they will not be charged for characters. The $ commands will be discussed in greater detail in future *Technical Bulletin* articles.

Geographic Subject Headings in the AIDS Bibliography

New for 1994! Geographic subject headings have been added to the AIDS Bibliography. The AIDS Bibliography contains citations to all preclinical, clinical, epidemiologic, diagnostic, and prevention areas added to NLM's MEDLINE, HEALTH, CANCERLIT, CATLINE, and AVLINE databases for a given month. It is a continuation in part of the National Library of Medicine's Literature Search Series, which ceased in 1987 with No. 87-15. Within that series, seventeen bibliographies titled Acquired Immunodeficiency Syndrome (AIDS) were published. The new series became a monthly publication beginning with January 1989. You can now easily find citations discussing the spread of AIDS in New York City or the incidence of AIDS/HIV in pregnant women in Uganda. This is done simply by looking under the relevant city, country, or region of the world. All journal articles, books, and audiovisuals in the AIDS Bibliography that discuss a particular geographic area are indexed to the specific area. For example, NLM has subject headings for London, England, Great Britain, and Europe. The individual states of the U.S. and Australia and the provinces of Canada are also index terms, as well as the regions of the U.S. For example, NLM has subject headings for San Francisco, California, and the Southwestern United States. Please note that NLM has always indexed to the most specific term, so that an article on AIDS in San Francisco would not also be indexed to California or to the Southwestern United States unless the article specifically discussed the state and/or region.

TOXLINE Regeneration

The TOXLINE and TOXLINE65 files are expected to be regenerated in May, and should be made available online shortly thereafter. After the rebuild, 1994 MeSH vocabulary will be present on records in the TOXBIB, BIOSIS, and DART subfiles. In addition, the TSCATS subfile will be replaced with a version that includes additional abstracts on records that were already present without abstracts. Updated Fiscal Year 1992 records for the CRISP subfile will also be found in TOXLINE, as well as the newest year of the CRISP toxicology research project reports from the Public Health Service, Fiscal Year 1993. The Federal Government Fiscal Year runs October-September. A large May update, 9405 (EM), is anticipated and will include records intended for the February, and March and April updates.

By late May NLM will have processed TOXLINE/ TOXLIT Automatic SDI searches after the updates have been completed. The TOXLIT file did not need to be rebuilt, but Automatic SDIs for this database were held for processing in conjunction with TOXLINE.

LIFENET Access to NLM

LIFENET is an electronic network integration system provided by NASA for the Life Sciences Community. It is used by some MLA-member librarians for e-mail and Internet access, including access to NLM databases and DOCLINE. While **LIFENET is no longer accepting new members**, a person who has already established an account with them will find that this service can be used to access NLM's ftp servers as well as Locator, NLM's public access catalog. Locator provides access to CATLINE, AVLINE, and SERLINE. Those who use LIFENET may also ftp online print files (see $DSFILE article on page 9 of this issue of the *Technical Bulletin*) or may ftp Automatic SDI search results (see September-October 1993 *Technical Bulletin*, pages 25-33). The MEDLARS Management Section now has a handout detailing how to use LIFENET to access the NLM anonymous ftp server, the MEDLARS ftp server (to ftp Automatic SDI search retrievals and search results), and NLM Locator. If you would like a copy of this handout, please send a request to the MEDLARS Management Section via fax, 800-638-8480, or e-mail, mms@nlm.nih.gov, or stop by the NLM booth at the MLA meeting in May.

1994 MeSH Supplementary Chemical Records Available from NTIS

The Medical Subject Headings—Supplementary Chemical Records, 1994 is now available from the National Technical Information Service (NTIS). The publication contains records of approximately 23,000 chemicals which, since 1970, have been mentioned in a significant way in journals indexed for MEDLINE and have been incorporated as a subset of the MeSH file. Note that these chemicals are in addition to the thousands of chemicals that are formal MeSH headings in Category D - Chemicals and Drugs of MeSH. To order documents from NTIS, you may use the order form in Appendix D of the January-February 1994 issue of the *Technical Bulletin*. Orders should be sent to:

National Technical Information Service (NTIS)
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
Order Number: PB94-121993

Hardcopy Price:	$50.00 (U.S./Canada/Mexico)
	$100.00 (other countries)
Microfiche Price:	$23.00 (U.S./Canada/Mexico)
	$46.00 (other countries)

Individuals with an NTIS deposit account or a major credit card who wish to order publications by phone may call 800-423-9255 or 703-487-4650. There is a $3.00 (U.S./Canada/Mexico) shipping and handling charge required for each order ($4.00 for other countries), and an additional charge of $7.50 for orders placed with a purchase order. Remittance or deposit account numbers should be sent with all mail orders.

Updated MEDLINE and MeSH Pocket Cards

Updated MEDLINE and MeSH pocket cards for 1994 are available from your Regional Medical Library (RML). Supplies may be limited, but the pocket cards are not copyrighted and may be reproduced freely. Please call your RML at 800-338-7657 to receive 1994 copies.

Hospital Literature Index

The American Hospital Association (AHA) Resource Center announces the availability of both the 1993 hardbound cumulation (Volume 49) and the first 1994 quarterly issue of the Hospital Literature Index (HLI). HLI is produced from NLM's Health Planning and Administration (HEALTH) database, and is the primary printed guide to literature on hospital and health services administration, including health systems, health care policy and reform, integrated community health delivery networks, health planning, and health services research. Nineteen ninety-four is a milestone anniversary year for HLI; it marks the fiftieth consecutive year of publication.

Single quarterly issues, including the casebound annual cumulation, will not be sold at a price less than the annual subscription rate. The order numbers and prices follow. For your convenience, an order form is included as Appendix A of this issue of the *Technical Bulletin*.

Hospital Literature Index
Volume 49, 1993 (Cumulation)

Catalog Number: HL-121490
Price: $225.00 (AHA member)
$290.00 (non-member)

Hospital Literature Index
1993 (Subscription)
Item Number: HL-M0940
Price: $240.00 (AHA member)
$310.00 (non-member)

Billed orders should be sent to:

Hospital Literature Index
American Hospital Publishing, Inc.
737 North Michigan Avenue, Suite 700
Chicago, IL 60611

phone: 800-621-6902 or 312-440-6800

Prepaid orders, with check or money order, should be made payable to and sent to:
American Hospital Publishing, Inc.
P.O. Box 92567
Chicago, IL 60675-2567

Corrections

On page 7 of the January-February 1994 *Technical Bulletin* article about HSTAR "NLM launches HSTAR..." (continued from page 1), the parenthetical statement in the first column's database description paragraph (that reads "See No. 6 below)" should read "See No. 5 below." The unique HSTAR record feature discussed is that there are two fields related to source information: PROCUREMENT SOURCE (PC) and ORDER NUMBER (OD).

Also, the Internet address for NLM's Office of Public Information was given incompletely on page 5 of the January-February 1994 *Technical Bulletin* The correct address is:

publicinfo@occshost.nlm.nih.gov. ❑

Continued from page 1

additional features. Before gophers, Internet users could only access resources they knew about or "go prospecting" for useful resources. Now, although each gopher site uses its own organization for the materials in its domain, gopher menus are like a directory listing of information sources. The user can browse through the directory via an on-screen menu display and request items of interest. If the user doesn't find everything desired in one gopher "library," gopher allows the user to pass electronically to the next gopher library and check there.

Gopher supports a great diversity of data, some of the most popular are:

- **Directories**

A directory is a menu of documents and services. The user can easily browse the menus, following pathways which may transparently bridge many different computers thousands of miles apart. Selecting a document retrieves and displays it for the user who may save a local copy. Services are described below.

- **Searching**

Rather than browsing, the user can enter a text word search against the document collection known to a local gopher or multiple gopher sites across the Internet. The user specifies keywords and, optionally, search logic. A menu display of documents matching the search is returned.

- **Text Files**

Most documents are provided as ASCII text files. Some gophers provide documents in additional formats, such as Word Perfect or PostScript (which are ASCII program files), to "power users" set up to deal with them.

- **Multimedia**

Gophers support image, audio, and video file formats. Images such as weather maps; digitized audio such as the 1992 presidential debates; and video movies are available to "power users."

- **Phone Books**

This gopher facility allows you to search for other Internet users. Some common search fields are phone number, e-mail address, and name.

- **Terminal Sessions**

Some gophers allow users to start terminal sessions with available applications. For example, the NLM Gopher allows the user to connect to NLM Locator (the NLM public access catalog), or to MEDLARS. MEDLARS access requires a User ID code and most MEDLARS services are fee-based.

NLM is currently constructing several gophers. The address of the main NLM Gopher, available since November 16, 1993, is **gopher.nlm.nih.gov**. Access is free and use is unlimited. Users can obtain biomedical subject bibliographies, NIH Clinical Alerts, NLM Fact Sheets, AIDS information, gene sequence information and many other resources from NLM's Gophers. See Figures 1-5 for sample screens. These screens pick up at the point where you have connected via Internet and logged onto the NLM Gopher. NLM sees Gopher and related systems as an important new way to make its documents available to the public. We welcome your use and solicit your comments; e-mail sent to admin@gopher.nlm.nih.gov will be routed to appropriate personnel.

An error occurred while printing this page.
Error: **stackunderflow** Offending Command: **exch**
Suggestions:
Restart your printer and send document again. Try proof print or moving some of the non-printing elements off the page.