

# The NLM

GRATEFUL MED Users  
Register for Version 5

ISSN 0146-3055

OCTOBER 1989

No. 246

# Technical Bulletin

## In This Issue:

Coming Attractions  
for the 1990 System 5

New ELHILL Search Capabilities:  
A Walk-Through 8

ELHILL 3.3A - Sorting  
and Combining your Search  
Results Online 25

MeSH Publications Delay:  
Impact on Searching 29

Year-End Processing 31  
1990 MeSH & Automatic SDI's

Appendix A: Pre-explosions 1990  
Appendix B: Semi-Monthly Update Schedule 1990  
Appendix C: Monthly Update Schedule 1990  
Appendix D: AIDSLINE Update Schedule 1990  
Appendix E: 1990 Holiday Schedule

## Regular Features:

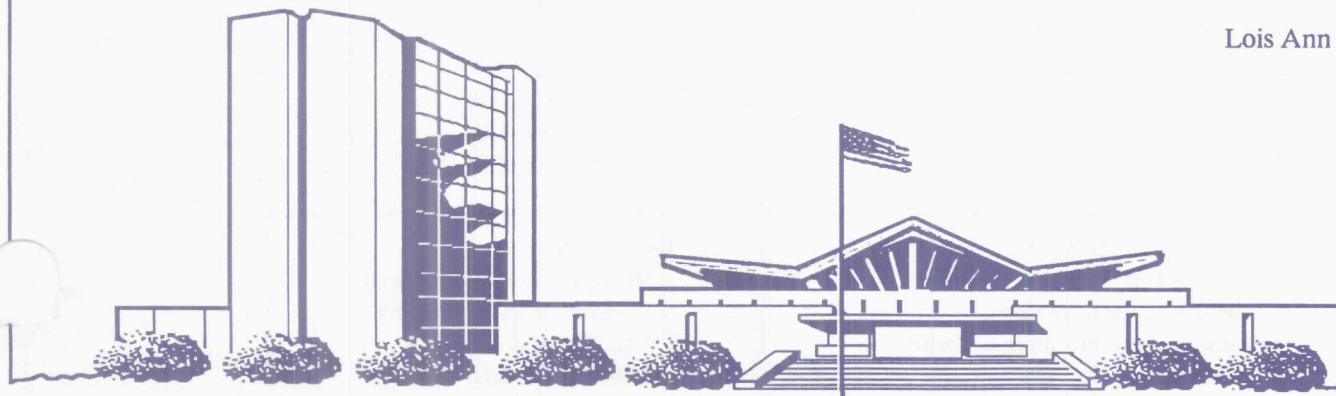
Databases	2
Technical Notes	3
GRATEFUL MED	23
Serials Update	36

**Editor's Note:** This issue of the Technical Bulletin contains many important items. New ELHILL search enhancements including an online sorting capability are introduced. There is also an expanded Technical Notes section, as well as a separate article, concentrating on topics related to Year-End processing. Year-End processing involves large-scale maintenance of MEDLINE, the MEDLINE Backfiles, HEALTH, and CANCERLIT databases, primarily to reflect changes in the MeSH vocabulary. Publication of the 1990 MeSH tools has been delayed. For complete details see article on page 29.

## ELHILL Enhancements

This past summer, in a collaborative project between NLM and the International MEDLARS Center at the British Library, David Kenton, NLM, and Fred Bone working for the British Library, developed an online sorting capability for ELHILL and accomplished a major redesign of the ELHILL architecture that permits a larger number of records in a "database". This issue contains a description of how to use the powerful capabilities of this software. Searchers are urged to read this documentation carefully and then try searches online. Non-billed codes are available from MEDLARS Management Section for a limited period to instruct groups of searchers on how to use the online sorting capability.

Lois Ann Colianni



NLM TECHNICAL BULLETIN OCT 89

MEDLARS® DATABASE	TOTAL RECORDS	DATES COVERED	DATE LAST UPDATED	LATEST UPDATE TAG
ELHILL® COMPUTER				
AIDSDRUGS	57		16 OCT 89	
AIDSLINE**™	24,520	JAN 80-DEC 89	06 NOV 89	8912(EM)
AIDSTRIALS	219		18 NOV 89	
AVLINE®	19,787	THROUGH 1989	18 NOV 89	
BIOETHICS®	28,402	JAN 73-OCT 89	07 OCT 89	8910(EM)
CANCERLIT®	701,132	JAN 63-NOV 89	04 NOV 89	8911(EM)
CATLINE®	654,684	THROUGH 1989	18 NOV 89	
CHEMLINE®	885,854		21 OCT 89	8910(EM)
CLINPROT®	7,582		18 NOV 89	8911(EM)
DENTALPROJ	776		28 JUN 89	
DIRLINE®	16,303		11 NOV 89	
DOCUSER®	11,631		20 OCT 89	
HEALTH	477,402	JAN 75-DEC 89	04 NOV 89	8912(EM)
HISTLINE®	91,111		04 NOV 89	8911(EM)
MEDLINE*®	556,617	JAN 88-DEC 89	28 OCT 89	8912(EM)
MED86	639,431	JAN 86-DEC 87	22 JUL 89	
MED83	889,211	JAN 83-DEC 85	18 FEB 89	
MED80	803,258	JAN 80-DEC 82	18 FEB 89	
MED77	775,192	JAN 77-DEC 79	18 MAR 89	
MED72	1,175,360	JAN 72-DEC 76	14 AUG 89	
MED66	1,310,376	JAN 66-DEC 71	03 JUN 89	
MESH VOC®	69,620	1989	28 OCT 89	
NAME AUTH®	339,058		20 NOV 89	
PDQ®		THRU NOV 89	31 OCT 89	
POPLINE™	171,940	1970-NOV 89	04 NOV 89	8911(EM)
SDILINE®	40,023	DEC 89	28 OCT 89	8912(EM)
SERLINE®	73,531	1989	14 NOV 89	
TOXLINE®	743,072	1981-1989	11 NOV 89	8911(EM)
TOXLINE65	698,414	PRE 1965-1980	04 MAR 89	
TOXLIT™	780,149	1981-1989	11 NOV 89	8911(EM)
TOXLIT65	586,405	1965-1980	01 SEP 87	

\*N.B. FILE IS UPDATED SEMI-MONTHLY; THIS IS PART 2 OF 2. \*\*N.B. FILE IS UPDATED THREE TIMES A MONTH; THIS IS PART 3 OF 3.

TOXNET COMPUTER

CCRIS	1,954		15 NOV 89
DBIR™	1,063		17 NOV 89
EMICBACK	67,975		02 JUN 89
ETICBACK	46,374		30 JAN 89
HSDB®	4,202		09 NOV 89
RTECS®	100,547		06 SEP 89
TRI	78,962		10 NOV 89

Head, MMS: Carolyn B. Tilley  
 Editor: Toby Port  
 Assistant Editor: Annette Morris  
 Technical Notes Editor: Joyce A. Conner  
 (301) 496-6193

Direct Inquiries to:  
 MEDLARS Management Section  
 National Library of Medicine  
 Bldg., 38A, Rm. 4N421  
 Bethesda, Maryland 20894

## Technical Notes

Whenever applicable, the heading of each Technical Note includes a reference to the section of the Online Services Reference Manual 1988 that is considered most relevant to the item being discussed, e.g., (Manual 4.7.2). Users should keep in mind that the item may pertain to other sections as well.

### THANKSGIVING HOLIDAY COMPUTER SCHEDULE

The following is the MEDLARS computer schedule for Thanksgiving Day, Thursday, November 23, 1989.

System	Rates/Status
ELHILL	non-prime non-guaranteed
TOXNET	non-prime guaranteed
DOCLINE	not available

#### Service Desks

MMS	not staffed
DOCLINE	not staffed

### SCHEDULED DOWNTIME DECEMBER 9 & 10

The NLM computer will be unavailable on Saturday, December 9, 1989, and Sunday, December 10, 1989, in order to install the MEDLINE, SDILINE, BACKFILES, HEALTH, CANCERLIT, AVLINE and CATLINE databases that have been Class Maintained with the 1990 Medical Subject Headings. Please see the article on page 31 in this issue titled "Year-End Processing" for additional information about the changes to the 1990 databases.

System	Rates/Status
ELHILL	not available
TOXNET	non-prime guaranteed
DOCLINE	not available

#### Service Desks

MMS	not staffed
DOCLINE	not staffed

### GOLD STANDARD SEARCHES

MEDLARS Management Section is happy to note that so many of you responded to the Gold Standard Search article in the July *Technical Bulletin*. Due to the number of responses, the the winning search strategies and accompanying analyses will be published in the November issue. Your suggestions for future search subjects are welcome.

### 1989 BIOETHICS THESAURUS AVAILABLE (Manual 21+)

The 1989 edition of the Bioethics Thesaurus, the controlled vocabulary of keywords used for indexing and searching BIOETHICSLINE, is now available. It can be purchased for \$5.00 (prepaid, checks made out to the Kennedy Institute of Ethics) from the BIOETHICS Information Retrieval Project, Kennedy Institute of Ethics, Georgetown University, Washington, DC 20057. Terms from this thesaurus are searchable in the Keyword (KW) field of the online database.

### CLINPROT INDEX TERM LISTING

The CLINPROT Index Term listing for October 1989 is now available. It may be requested by writing to the National Cancer Institute. Please include a self-addressed label with your request. No return postage is necessary. Please send requests to:

International Cancer Research Data Bank Branch  
National Cancer Institute  
R.A. Bloch Building (82), Room 103  
Bethesda, MD 20892

### DATABASE UPDATE SCHEDULE

The database update schedules are published in Appendices B, C, and D; they are published on 3 separate lists this year based on update frequency. MEDLINE (Appendix B) is updated twice a month; AIDSLINE (Appendix C) is updated three times a month; and the remainder of the databases in Appendix D are updated once each month. These lists may be removed from this issue and posted near the searcher's terminal.

### PRE-EXPLOSIONS TO BE ADDED TO 1991 SYSTEM

The limit has been lifted on the number of Pre-explosions for the 1991 system. Pre-explosions (PX) are selected MeSH Headings (MH) that have already been EXPLODED to hasten retrieval of large numbers of citations. Suggestions for new Pre-explosions are being taken now for 1991. Please remember that a Pre-explosion is based on the MeSH Tree Structure; all terms must have the same root number in order to be part of a Pre-explosion. Terms which are logically related but do not share a common MeSH root number cannot be exploded or pre-exploded.

Please send Pre-explosion suggestions by March 1, 1990 to:

MEDLARS Management Section  
National Library of Medicine  
8600 Rockville Pike  
Bethesda, MD 20894

Appendix A is a list of available Pre-explosions for 1990. The list of Pre-explosions is printed on one side so it can be removed from this issue and posted near the searcher's terminal. Pre-exploded terms are indicated by a black dot (●) next to the heading in the body of the 1990 alphabetic MeSH and the Tree Structures. No new Pre-explosions were added for 1990.

### NEW SI VALUES FOR MEDLINE AND THE BACKFILES

Records in MEDLINE and its Backfiles have been enhanced with additional Secondary Source ID (SI) values in support of NLM's biotechnology effort. SI values for the Human Gene Mapping Library (HGML) have been added. The format for this SI field is the same as for the GENBANK material:

Databank abbreviation/Accession Number  
For example:

HGML/KOO2O7

Most of the SI data was added to records with a publication year of 1978 to the present, but some citations in MED66 and MED72 were also enhanced. As part of the same effort, additional SI values for GENBANK were also added.

## Coming Attractions for the 1990 System

### MEDLINE BACKFILE CONFIGURATION - 1990

There has been a major redesign of the ELHILL architecture, permitting the existence of larger databases. As a result, this year there will be no change in the configuration of the MEDLINE Backfiles. The primary dates of coverage for MEDLINE and its Backfiles will be as follows:

Primary File	Aliases	Coverage
MEDLINE	MED	1988-1990
MED86	M86, BACK86, B86	1986-1987
MED83	M83, BACK83, B83	1983-1985
MED80	M80, BACK80, B80	1980-1982
MED77	M77, BACK77, B77	1977-1979
MED72	M72, BACK72, B72	1972-1976
MED66	M66, BACK66, B66	1966-1971

### BIOTECHNOLOGY FILE

As part of its biotechnology information initiative, NLM will be introducing a new database this winter. Tentatively referred to as the Biotechnology File, this database will contain citations and abstracts to biotechnology journal articles not covered in MEDLINE. The structure and searching features of the new database will be identical to those of MEDLINE. Both files should be searched for biotechnology topics because there will be no overlap in coverage between the two. Journals for this complementary biotechnology file will be recommended by NLM's Literature Selection Technical Review Committee. Initially, there will be approximately twenty titles indexed. In future developments of this database, citations derived from other bibliographic services will also be included; the first of these citations will be to articles with molecular sequences retrieved from the National Agriculture Library's AGRICOLA file.

### NEW MESH HEADINGS

NLM has added over 400 new MeSH headings for 1990 indexing. Close to 50 new terms in epidemiology, statistics, and public health were added and the E5 and G3 trees (in this area) were greatly reorganized. Some

of the new terms in these trees include INCIDENCE; PREVALENCE; and SURVIVAL RATES.

The C11 Eye Diseases category was significantly revised. It was retreed and expanded with about 40 new headings. A completely new array for EYE INFECTIONS along with several specifics was created and the section on UVEAL DISEASES was revised and enlarged. Some of the new terms in Eye Diseases include EYE INFECTIONS; CORNEAL EDEMA; EYE INJURIES, PENETRATING; and UVEITIS.

The following are some of the new headings related to the molecular biology, diagnosis and treatment of AIDS:

HERPESVIRUS-6, HUMAN;  
HIV SEROPREVALENCE;  
HIV INFECTIONS;  
AIDS DEMENTIA COMPLEX;  
GANCICLOVIR;  
TRICHOSANTHIN; and  
DIDEOXYINOSINE.

HIV SEROPREVALENCE, a new 1990 AIDS-related term in the G3 tree (Environment and Public Health) indented under EPIDEMIOLOGIC METHODS, is the study of the number of cases where Human Immunodeficiency Virus (HIV) is present in a specific population at a specific time. In contrast, the existing MeSH heading, HIV SEROPOSITIVITY, is a C2 term (Diseases, Viral) and it measures the antibodies to HIV in an individual person's serum to show the presence of the viral infection. The determination of the number of persons with HIV SEROPOSITIVITY in a particular place and time, allows the epidemiologist to calculate the HIV SEROPREVALENCE for that population.

Molecular biology has many new headings related to gene sequence, structure, expression and function. ONCOGENE PRODUCTS; TRANS-ACTIVATION (GENETICS); VIRAL REGULATORY PROTEINS; MICRONUCLEI; GENE LIBRARY; and GENOME, HUMAN constitute a few of the new terms in this grouping.

The following new terms should be of interest to searchers with queries about fraudulent research: SCIENTIFIC MISCONDUCT; DUPLICATE PUBLICATION; and PLAGIARISM.

There are 11 new transplant terms with ten organ pre-coordinated terms. Some of these terms include:

BONE MARROW TRANSPLANTATION;  
BONE TRANSPLANTATION;  
CORNEAL TRANSPLANTATION;

HEART TRANSPLANTATION;  
HEART-LUNG TRANSPLANTATION;  
KIDNEY TRANSPLANTATION; and  
LIVER TRANSPLANTATION.

The new MeSH headings with scope notes (definitions and rules for use) appear at the front of the Medical Subject Headings - Annotated Alphabetic List, 1990. Searchers should read through this list.

#### TITLE FIELD TEXT WORDS

Title Field Text Words (TF) will be available for 3 new files in 1990: AIDSLINE, CATLINE, and AVLINE. Searching in CATLINE and AVLINE using the (TF) qualifier will retrieve citations with Text Words from the first occurrence of the Title (TI) and the Title Continuation (TC) fields. Using Text Words from Titles only can be a helpful limiting search technique. Please note Text Word (TW) searching has not changed. Text Words are extracted from different data elements, including the Abstract field, if present, in the various databases. See Chapter 4.13 of the Online Services Reference Manual for specific details for each file.

#### UNITED STATES - CATEGORY Z

UNITED STATES BY INDIVIDUAL STATE (NON MESH) and UNITED STATES BY REGION (NON MESH) are 2 new non-MeSH headings created to group the states of the Union more conveniently for searchers. Each of these terms will be indented under UNITED STATES in the Category Z tree. Under the first term each state and the District of Columbia will be listed, but NOT the names of the regions. Under the second term will appear the eight named regions and under them will appear the states commonly referred to in the respective regions. The same state may appear in more than one region; the assignment of states is by popular use, not an official geographic designation. Because there isn't unanimity among states as to where they are considered to be regionally, the regional assignment is an informal one for the convenience of searchers.

#### COMMENTS FIELD

The Comments (CM) field, introduced with 1989 publications, will be more widely used during 1990. This field was created to provide a link between an article and subsequent comments about the article when both are from the same journal.

Here is a brief explanation:

If a comment for an article is cited online, the Title (TI) field for the article will include the rubric [see comments]. This is to draw your attention to the Comments (CM) field on the same record to find the citation for the comment(s). For example:

TI - The Journal's peer-review process [see comments]  
CM - Comment in: N Engl J Med 1989 Sep 21;  
321(12):827-9

The majority of comments are found as letters to the editor or editorials. This information is now noted in the Title field (TI) by the rubrics [letter; comment], [editorial; comment], or simply [comment] where appropriate. Citations for comments will also carry a Comment field which will contain the citation for the article that prompted this comment. For example:

TI - How good is peer review? [editorial; comment]  
CM - Comment on: N Engl J Med 1989 Jul 27;  
321(4):255-7

#### EXPANDED SUBHEADINGS

This year many subheadings were expanded, i.e., became allowable with more MeSH headings than in the past. NLM will continue this expansion for 1990, thereby allowing even more subheadings to be used or applied with even more MeSH headings on a heading-by-heading basis. Because of this expansion, The Annotated Alphabetic Mesh has a revised format for "Allowable Categories", indicating general permissions and restrictions at the Category level. To find out if a subheading can be used with a particular MeSH heading, searchers are now referred to the record for the MeSH heading in the MeSH database (file MeSH). The field of interest is the Allowable Topical Qualifiers (AQ) field and will list the subheadings that can be used with the MeSH heading.

The following subheadings were expanded to entire trees:

/epidemiology	new to Category Z
/injuries	new to Category I3
/psychology	new to Category B2 (although not with fish and other unlikely organisms)

## INDEXING POLICY CHANGES

Beginning with 1990 publication dates, author affiliations will be given for Special List Health, Special List Dental and Special List Nursing journal and other non-English language journals, for which they were not provided in the past. However, author affiliations will not be available in records for citations with any of the following rubrics: [editorial], [letter], [interview], [news], or [classical article].

Starting with 1990 indexing, indexers will provide transliterations of up to ten authors from Cyrillic and Japanese journals; in the past, the number of authors whose names were transliterated was limited to five. Now all languages will be handled the same way; in all cases, if there are more than ten authors, et al. indicates the presence of additional authors in the publication which are not available online.

## New ELHILL Search Capabilities: A Walk-Through

Jane L. Rosov  
Kathleen A. Sprague  
MEDLARS Management Section, NLM

NLM is pleased to announce the availability on November 20, 1989 of ELHILL 3.3A, the enhanced MEDLARS retrieval software which introduces new system features applicable for online printing. These features allow the user to:

1. Collect retrieval from multiple search statements (which may come from different databases) before printing online.
2. Sort retrieval from single or multiple search statements (from the same or different databases). This retrieval may be sorted in any desired sequence before printing online.

The following examples step through several online interactions incorporating the new system features and highlighting some of the practical ways that these capabilities can be used. The techniques illustrated for sorting and combining retrieval for online printing are:

**EXAMPLE 1.** Using the command SPRINT to sort retrieval from a single search statement and also to combine and sort retrieval from more than one search statement from a single database.

**EXAMPLE 2.** Using the command SPRINT to combine and sort retrieval from more than one database.

**EXAMPLE 3.** Requesting prompts for sorting and/or combining retrieval obtained from a Multifile search (MFS) by using the keyword PROMPT with the MFS command.

**EXAMPLE 4.** Requesting MFS retrieval to be sorted and/or combined by using SORT and/or COMB keywords with the MFS command.

There are more "sophisticated" techniques that could be performed; however, we suggest you keep to the basics at first by using the techniques shown in these examples. Here are some important points to keep in mind concerning these new features:

1. No set of retrieval containing more than 500 postings may be sorted.
2. Sets of retrieval may not be combined if the total number of postings is greater than 500.
3. In order to work with sets of retrieval from multiple databases, be sure to use the command TFILE when switching databases (or perform an MFS search in TFILE or AUTO mode).
4. It is a good idea to use precoded format specifications such as AUTI or JNL when sorting or combining retrieval from different databases. As a general rule, do not attempt to sort or combine retrieval from databases that are dissimilar.
5. The command SPRINT must be used in order to sort and/or combine retrieval (unless MFS is used). SORT and/or COMB may not be used with the PRINT command.
6. The search statement number(s) to be sorted and/or combined must be designated immediately following the command SPRINT with the options following (e.g., SPRINT 1-7 SORT or SPRINT 2,4-6,9 SORT COMB or SPRINT ALL PROMPT).
7. Note that only online printing is allowed from mixed-database lists. A sorted list may be printed offline provided it is from a single database.

The article entitled "ELHILL 3.3A - Sorting and Combining Your Search Results Online" (also in this issue) presents a detailed narrative for an in depth look at the technical aspects of these new capabilities. Both this article (a practical walkthrough) and the detailed narrative are available as online EXPLAINS. Type EXPLAIN WALK-THROUGH or EXPLAIN NEW FEATURES to see this information online; to reduce costs, be sure to read and/or print this information in FILE INFORM, as these EXPLAINS are identical to the printed articles in this issue and are quite long.

For a review of SPRINT and MFS, please refer to the October and November 1988 *Technical Bulletins* in which these features were first introduced. The sample online interactions in these articles detail the use of SPRINT and MFS. Contact MMS for reprints if you do not have these issues. In addition, refer to Chapter 5 of the Online Services Reference Manual (Sections 5.4.2, 5.4.4, 5.4.4.1, 5.4.4.2 and 5.4.5) for details on sort specifications.



NLM is pleased to offer the use of non-billed codes for limited periods to searchers who would

like to practice these features. Please contact MMS for assignment of these codes.

EXAMPLE 1 - Use of SPRINT to sort retrieval from a single search statement and also to combine and sort retrieval from more than one search statement from a single database.

WELCOME TO THE NATIONAL LIBRARY OF MEDICINE'S ELHILL RETRIEVAL SYSTEM.  
YOU ARE NOW CONNECTED TO THE MEDLINE (1988 - 89) FILE.

SS 1 /C?  
USER:  
raynaud's diseases/di  
PROG:  
SS (1) PSTG (38)

SS 2 /C?  
USER:  
angioneurotic edema/di  
PROG:  
SS (2) PSTG (12)

SS 3 /C?  
USER:  
1 or 2  
PROG:  
SS (3) PSTG (50)

- Because retrieval in SS 3 is fewer than 500, sorting is possible.
- Command SPRINT is used to sort and/or combine retrieval(s). (PRINT will not work with SORT or COMB)

SS 4 /C?  
USER:  
sprint 3 sort  
PROG:

- Must enter the search statement number(s) to be sorted and/or combined immediately following the command SPRINT.

SEARCH 3 WITH 50 ITEM(S) FROM MEDLINE IS NOW READY FOR SORTING.  
ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:  
auti  
PROG:

- Precoded sort specifications or tailored sort specification may be used here. AUTI sorts alphabetically by authors' last name.

ENTER SPECIFICATIONS FOR PRINTING (E.G., BR, SD, FU, DL), OR 'SAME' (DO NOT USE THE WORDS 'PRINT' OR 'PRT'):

USER:  
sd  
PROG:

- The above message prompts you to enter the data elements desired for printing.

1  
UI - 89303422  
AU - Akesson A  
AU - Wollheim FA  
TI - Organ manifestations in 100 patients with progressive systemic sclerosis: a comparison between the CREST syndrome and diffuse scleroderma.  
S0 - Br J Rheumatol 1989 Aug;28(4):281-6

- The retrieval is sorted alphabetically by authors' name.

2  
UI - 89031287  
AU - Arntz IE  
AU - van de Wal HJ  
AU - Wijn PF  
AU - Skotnicki SH  
TI - Quantitative assessment of vasospasm by Doppler spectrum analysis in patients with primary Raynaud's phenomenon.  
S0 - Eur J Vasc Surg 1987 Feb;1(1):19-28

3  
UI - 88243027  
AU - Balan GM  
TI - [Adrenergic reactivity of the peripheral vessels to exposure to  
local vibration and the use of the adrenaline test for  
detecting Raynaud's syndrome]  
SO - Gig Tr Prof Zabol 1988 Mar;(3):39-42

4  
UI - 89149845  
AU - Barnett AJ  
TI - The "neck sign: in scleroderma.  
SO - Arthritis Rheum 1989 Feb;32(2):209-11

CONTINUE PRINTING? (YES/NO)

USER:  
n  
PROG:

YOUR LAST SEARCH TO BE PRINTED HAS BEEN PROCESSED.

REPRINT PRIOR SEARCH RESULTS? (Y/N/C/SKIP PLUS OPTIONAL WORD(S)  
'PRINTSPECS' AND/OR 'RECORDS' TO REQUEST PROMPTS FOR THESE CHANGES):

USER:  
n

PROG:  
SUPERPRINT COMPLETED.

SS 4 /C?  
USER:  
sprint 1,2 sort comb

● SPRINT may also be used to both sort and  
combine multiple search statements. The  
retrieval from SS 1 and SS 2 has been  
combined.

PROG:

COMBINED SEARCHES WITH 50 ITEM(S) FROM MEDLINE ARE NOW READY FOR  
SORTING.

● The retrieval has been combined.

ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:  
same

● The same sort specifications as last entered  
in this session (i.e., AUTI) are desired.

PROG:  
ENTER SPECIFICATIONS FOR PRINTING (E.G., BR, SD, FU, DL), OR 'SAME'  
(DO NOT USE THE WORDS 'PRINT' OR 'PRT'):

USER:  
sd

PROG:

1  
UI - 89303422  
AU - Akesson A  
AU - Wollheim FA  
TI - Organ manifestations in 100 patients with progressive systemic  
sclerosis: a comparison between the CREST syndrome and diffuse  
scleroderma.  
SO - Br J Rheumatol 1989 Aug;28(4):281-6

2  
 UI - 89031287  
 AU - Arntz IE  
 AU - van de Wal HJ  
 AU - Wijn PF  
 AU - Skotnicki SH  
 TI - Quantitative assessment of vasospasm by Doppler spectrum  
 analysis in patients with primary Raynaud's phenomenon.  
 SO - Eur J Vasc Surg 1987 Feb;1(1):19-28

3  
 UI - 88243027  
 AU - Balan GM  
 TI - [Adrenergic reactivity of the peripheral vessels to exposure to  
 local vibration and the use of the adrenaline test for  
 detecting Raynaud's syndrome]  
 SO - Gig Tr Prof Zabol 1988 Mar;(3):39-42

4  
 UI - 89149845  
 AU - Barnett AJ  
 TI - The "neck sign: in scleroderma.  
 SO - Arthritis Rheum 1989 Feb;32(2):209-11

.  
 .  
 .

EXAMPLE 2 - Use of SPRINT to combine and sort retrieval from more than one database.

SS 1 /C?  
 USER:  
 \*raynaud's disease/di  
 PROG:  
 SS (1) PSTG (19)

● By using TFILE to move into a different database, the retrieval from MEDLINE (SS 1) is not lost.

SS 2 /C?  
 USER:  
 tfile med86  
 PROG:  
 YOU ARE NOW CONNECTED TO THE BACK86 (1986 - 87) FILE.

SS 2 /C?  
 USER:  
 \*raynaud's disease/di  
 PROG:  
 SS (2) PSTG (34)

● Retrieval from both search statements may now be combined and sorted. It may also be sorted (and printed) individually without being combined (e.g., SPRINT 1 SORT SPRINT 2 SORT)

SS 3 /C?  
 USER:  
 sprint 1,2 sort comb

PROG:

COMBINED SEARCHES WITH 53 ITEM(S) FROM MORE THAN ONE DATABASE ARE NOW READY FOR SORTING.

● ELHILL acknowledges the request.

ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:  
 jnl

● This standardized sort specification is alphabetical by journal title.

PROG:  
 SORT SPECIFICATIONS HAVE BEEN CHECKED FOR VALIDITY AGAINST THE MEDLINE FILE.

ENTER SPECIFICATIONS FOR PRINTING (E.G., BR, SD, FU, DL), OR 'SAME' (DO NOT USE THE WORDS 'PRINT' OR 'PRT'):

USER:  
 ta

● A tailored printout of just title abbreviations is requested here.

PROG:  
PRINT ELEMENTS, IF ANY, WILL BE EVALUATED AGAINST THE MEDLINE FILE.

1 (MEDLINE)  
TA - Acta Biomed Ateneo Parmense

2 (BACK86)                   ● The retrieval is combined and sorted. The  
TA - Am J Med               database from which each record has come  
                                  appears in parentheses next to the record  
                                  number.

3 (MEDLINE)  
TA - Ann Vasc Surg

4 (MEDLINE)  
TA - Br J Ind Med

5 (MEDLINE)  
TA - Br J Ind Med

EXAMPLE 3 - Using the keyword PROMPT when doing a Multifile search (MFS) to receive prompts for sorting and/or combining options.

- 3a. Sorting only requested when all options are available.
- 3b. Sorting and combining requested when all options are available.
- 3c. All options are not available.

3A. Use of PROMPT keyword; only SORTING requested.

SS 1 /C?                   ● Requests are made for automatic mode and  
USER:                       for prompts for sorting and/or combining  
mfs mode=auto prompt       options.  
PROG:  
SEARCH TO BE RUN ALREADY EXISTS. DO YOU WISH TO REPLACE IT? (Y/N)  
USER:  
y

PROG:  
MULTIFILE SESSION ABOUT TO BEGIN  
MODE: AUTO PROMPT       ● Request for automatic mode and prompts  
SEARCHNAME: &-MFS-& (TO BE INPUT)   is acknowledged.  
FILES TO BE SEARCHED:  
\*\* MEDLINE               (1988 - 89)  
\*\* BACK86                (1986 - 87)  
\*\* BACK83                (1983 - 85)  
\*\* BACK80                (1980 - 82)  
\*\* BACK77                (1977 - 79)  
\*\* BACK72                (1972 - 76)  
\*\* BACK66                (1966 - 71)  
OK? (Y/N/C/LIST)

USER:  
y

PROG:  
ENTER SEARCH-

\*STS\* SS 1 /C?  
USER:  
\*raynaud's disease/di  
PROG:  
SS (1) PSTG (19)

\*STS\* SS 2 /C?  
USER:  
ts (1a) eng  
PROG:  
SS (2) PSTG (10)

\*STS\* SS 3 /C?

USER:  
finished

PROG:

SEARCH SET FROM SS 1 FORWARD SAVED AS '&-MFS-  
YOU ARE NOW CONNECTED TO THE BACK86 (1986 - 87) FILE.  
SS (2) PSTG (14)  
YOU ARE NOW CONNECTED TO THE BACK83 (1983 - 85) FILE.  
SS (3) PSTG (1)  
YOU ARE NOW CONNECTED TO THE BACK80 (1980 - 82) FILE.  
SS (4) PSTG (12)  
YOU ARE NOW CONNECTED TO THE BACK77 (1977 - 79) FILE.  
SS (5) PSTG (9)  
YOU ARE NOW CONNECTED TO THE BACK72 (1972 - 76) FILE.  
SS (6) PSTG (13)  
YOU ARE NOW CONNECTED TO THE BACK66 (1966 - 71) FILE.  
SS (7) PSTG (13)

THE FOLLOWING OUTPUT OPTIONS ARE POSSIBLE:

- 1 UNSORTED, SEPARATE (ONE SEARCH STATEMENT AT A TIME).
- 2 SORTED, SEPARATE.
- 3 UNSORTED, COMBINED (ALL SEARCH STATEMENTS TOGETHER).
- 4 SORTED, COMBINED.

ENTER A SINGLE NUMBER FROM THE PRECEDING MENU:

USER:  
2

- These are the 4 possible options. Depending on the size of the output, all options may not always be presented. (Up to 500 records may be sorted and/or combined at one time.) Retrieval from each SS will be sorted and printed separately using Choice 2.

PROG:

SEARCH 1 WITH 10 ITEM(S) FROM MEDLINE IS NOW READY FOR SORTING.

ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:  
auti

PROG:

ENTER SPECIFICATIONS FOR PRINTING (E.G., BR, SD, FU, DL), OR 'SAME' (DO NOT USE THE WORDS 'PRINT' OR 'PRT'):

USER:  
sd

- Retrieval is sorted alphabetically by authors' last name as requested in sort specification response.

PROG:

1  
(MEDLINE)  
UI - 89303422  
AU - Akesson A  
AU - Wollheim FA  
TI - Organ manifestations in 100 patients with progressive systemic sclerosis: a comparison between the CREST syndrome and diffuse scleroderma.  
SO - Br J Rheumatol 1989 Aug;28(4):281-6

2 (MEDLINE)  
UI - 89053062  
AU - Friedman EI  
AU - Taylor LM Jr  
AU - Porter JM  
TI - Late-onset Raynaud's syndrome: diagnostic and therapeutic considerations.  
RF - REVIEW ARTICLE: 20 REFS.  
SO - Geriatrics 1988 Dec;43(12):59-63, 67-70

3 (MEDLINE)

UI - 89294538  
 AU - James CA  
 AU - Aw TC  
 AU - Harrington JM  
 AU - Trethowan WN  
 TI - A review of 132 consecutive patients referred for assessment of vibration white finger.  
 RF - REVIEW ARTICLE: 13 REFS.  
 SO - J Soc Occup Med 1989 Summer;39(2):61-4

4 (MEDLINE)

UI - 88245149  
 AU - Maricq HR  
 AU - Weinrich MC  
 TI - Diagnosis of Raynaud's phenomenon assisted by color charts.  
 SO - J Rheumatol 1988 Mar;15(3):454-9  
 CONTINUE PRINTING? (YES/NO)

USER:

n

PROG:

SEARCH 2 WITH 14 ITEM(S) FROM BACK86 IS NOW READY FOR SORTING.

REPRINT PRIOR SEARCH RESULTS? (Y/N/C/SKIP PLUS OPTIONAL WORD(S) 'PRINTSPECS' AND/OR 'RECORDS' TO REQUEST PROMPTS FOR THESE CHANGES):

USER:

n

PROG:

ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:

same

• The same sort specification, AUTI, is desired. If a different sort specification were desired, it could be designated here (e.g., JNL or DP).

PROG:

1 (BACK86)

UI - 87224403  
 AU - Bull ML  
 AU - Evans MJ  
 AU - Gupta R  
 AU - Grigg MJ  
 AU - Nicolaides AN  
 TI - The assessment of Raynaud's phenomenon using a radiation thermometer and a mild cold (20 degrees C) stress test.  
 SO - Int Angiol 1986 Oct-Dec;5(4):237-42

2 (BACK86)

UI - 88126958  
 AU - Dupuis H  
 TI - Thermographic assessment of skin temperature during a cold provocation test.  
 SO - Scand J Work Environ Health 1987 Aug;13(4):352-5

3 (BACK86)

UI - 86187611  
 AU - Ekenvall L  
 AU - Lindblad LE  
 TI - Vibration white finger and digital systolic pressure during cooling.  
 SO - Br J Ind Med 1986 Apr;43(4):280-3

4 (BACK86)

UI - 86298051  
 AU - Feller SR  
 AU - Dockery GL  
 TI - Vasospastic diseases. Diagnosis and management.  
 SO - Clin Podiatr Med Surg 1986 Jul;3(3):463-71

.

.

.

READY TO PRINT FROM SEARCH 3, CONTAINING 1 ITEM(S) FROM BACK83.

REPRINT PRIOR SEARCH RESULTS? (Y/N/C/SKIP PLUS OPTIONAL WORD(S)  
'PRINTSPECS' AND/OR 'RECORDS' TO REQUEST PROMPTS FOR THESE CHANGES):

USER:

n

- Only 1 record in the database - therefore, no sort is necessary or possible.

PROG:

1 (BACK83)  
 UI - 85177781  
 AU - Maricq HR  
 AU - Harper FE  
 AU - Khan MM  
 AU - Tan EM  
 AU - LeRoy EC  
 TI - Microvascular abnormalities as possible predictors of disease subsets in Raynaud phenomenon and early connective tissue disease.  
 SO - Clin Exp Rheumatol 1983 Jul-Sep;1(3):195-205

SEARCH 4 WITH 12 ITEM(S) FROM BACK80 IS NOW READY FOR SORTING.

REPRINT PRIOR SEARCH RESULTS? (Y/N/C/SKIP PLUS OPTIONAL WORD(S)  
'PRINTSPECS' AND/OR 'RECORDS' TO REQUEST PROMPTS FOR THESE CHANGES):

USER:

n

PROG:

ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:

same

PROG:

- Records that do not contain the data element to be sorted will appear first.

1 (BACK80)  
 UI - 81209164  
 TI - Vibration syndrome again [editorial]  
 SO - Br Med J [Clin Res] 1981 May 30;282(6278):1738-9

2 (BACK80)  
 UI - 83048894  
 AU - Ekenvall L  
 AU - Lindblad LE  
 TI - Digital blood pressure after local cooling as a diagnostic tool in traumatic vasospastic disease.  
 SO - Br J Ind Med 1982 Nov;39(4):388-91

3 (BACK80)  
 UI - 81163463  
 AU - Harper FE  
 AU - LeRoy EC  
 TI - Raynaud's phenomenon and scleroderma.  
 SO - Compr Ther 1981 Feb;7(2):45-51

4 (BACK80)

UI - 82155545  
 AU - Heidrich H  
 AU - Malchus R  
 TI - HLA-antigen in the differential diagnosis of the Raynaud-phenomenon.  
 SO - Vasa 1982;11(1):29-31

.  
 .  
 .

3B. Use of PROMPT keyword; combining and sorting requested.

SS 8 /C?  
 USER:  
 mfs mode=auto prompt

PROG:  
 SEARCH TO BE RUN ALREADY EXISTS. DO YOU WISH TO REPLACE IT? (Y/N)

USER:  
 n

PROG:  
 MULTIFILE SESSION ABOUT TO BEGIN  
 MODE: AUTO PROMPT  
 SEARCHNAME: &-MFS-& (EXISTING VERSION)  
 FILES TO BE SEARCHED:

** MEDLINE	(1988 - 89)
** BACK86	(1986 - 87)
** BACK83	(1983 - 85)
** BACK80	(1980 - 82)
** BACK77	(1977 - 79)
** BACK72	(1972 - 76)
** BACK66	(1966 - 71)

OK? (Y/N/C/LIST)

USER:  
 y

PROG:  
 YOU ARE NOW CONNECTED TO THE MEDLINE (1988 - 89) FILE.  
 SS (8) PSTG (10)  
 YOU ARE NOW CONNECTED TO THE BACK86 (1986 - 87) FILE.  
 SS (9) PSTG (14)  
 YOU ARE NOW CONNECTED TO THE BACK83 (1983 - 85) FILE.  
 SS (10) PSTG (1)  
 YOU ARE NOW CONNECTED TO THE BACK80 (1980 - 82) FILE.  
 SS (11) PSTG (12)  
 YOU ARE NOW CONNECTED TO THE BACK77 (1977 - 79) FILE.  
 SS (12) PSTG (9)  
 YOU ARE NOW CONNECTED TO THE BACK72 (1972 - 76) FILE.  
 SS (13) PSTG (13)  
 YOU ARE NOW CONNECTED TO THE BACK66 (1966 - 71) FILE.  
 SS (14) PSTG (13)

THE FOLLOWING OUTPUT OPTIONS ARE POSSIBLE:

- 1 UNSORTED, SEPARATE (ONE SEARCH STATEMENT AT A TIME).
- 2 SORTED, SEPARATE.
- 3 UNSORTED, COMBINED (ALL SEARCH STATEMENTS TOGETHER).
- 4 SORTED, COMBINED.

ENTER A SINGLE NUMBER FROM THE PRECEDING MENU:

USER:  
 4

● Retrieval from the 7 search statements will be combined, sorted and printed. All four output options are also available for this search.

PROG:

COMBINED SEARCHES WITH 72 ITEM(S) FROM MORE THAN ONE DATABASE ARE NOW READY FOR SORTING.

ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:  
 auti

PROG:  
 SORT SPECIFICATIONS HAVE BEEN CHECKED FOR VALIDITY AGAINST THE MEDLINE FILE.  
 ENTER SPECIFICATIONS FOR PRINTING (E.G., BR, SD, FU, DL), OR 'SAME' (DO NOT USE THE WORDS 'PRINT' OR 'PRT'):

USER:  
 sd



PROG:  
 PRINT ELEMENTS, IF ANY, WILL BE EVALUATED AGAINST THE MEDLINE FILE.  
 ● Retrieval from 7 databases is combined and sorted as requested.

1  
 (BACK80)  
 UI - 81209164  
 TI - Vibration syndrome again [editorial]  
 SO - Br Med J [Clin Res] 1981 May 30;282(6278):1738-9

2 (BACK72)  
 UI - 77051403  
 AU - Agrifoglio G  
 AU - Agus GB  
 TI - Observations on the Raynaud's disease.  
 SO - J Cardiovasc Surg (Torino) 1976 Nov-Dec;17(6):513-8

3 (MEDLINE)  
 UI - 89303422  
 AU - Akesson A  
 AU - Wollheim FA  
 TI - Organ manifestations in 100 patients with progressive systemic sclerosis: a comparison between the CREST syndrome and diffuse scleroderma.  
 SO - Br J Rheumatol 1989 Aug;28(4):281-6

4 (BACK77)  
 UI - 80018872  
 AU - Babenerd J  
 AU - Flenker H  
 TI - Pregnancy in a patient with Raynaud's disease.  
 SO - Arch Gynecol 1979 Aug;227(2):119-23

CONTINUE PRINTING? (YES/NO)

USER:  
 n

PROG:

YOUR LAST SEARCH TO BE PRINTED HAS BEEN PROCESSED.

REPRINT PRIOR SEARCH RESULTS? (Y/N/C/SKIP PLUS OPTIONAL WORD(S)  
 'PRINTSPECS' AND/OR 'RECORDS' TO REQUEST PROMPTS FOR THESE CHANGES):

USER:  
 n

PROG:  
 SUPERPRINT COMPLETED.

3C. - All PROMPT options are not available.

SS 1 /C?  
 USER:  
 mfs medline,med86,med83,cancerlit mode=auto prompt

● After MFS command, list of databases to be searched is entered, followed by mode=<keywords desired>.

PROG:  
 SEARCH TO BE RUN ALREADY EXISTS. DO YOU WISH TO REPLACE IT? (Y/N)

USER:  
 y

PROG:  
 MULTIFILE SESSION ABOUT TO BEGIN  
 MODE: AUTO PROMPT                   ● Keywords acknowledged.  
 SEARCHNAME: &-MFS-& (TO BE INPUT)  
 FILES TO BE SEARCHED:  
 \*\* MEDLINE                           (1988 - 89)  
 \*\* BACK86                           (1986 - 87)  
 \*\* BACK83                           (1983 - 85)  
 \*\* CANCERLINE                       (CANCERLIT)  
 OK? (Y/N/C/LIST)

USER:  
 y

PROG:  
 ENTER SEARCH-  
 YOU ARE NOW CONNECTED TO THE MEDLINE (1988 - 89) FILE.

\*STS\* SS 1 /C?  
 USER:  
 osteosarcoma

PROG:  
 SS (1) PSTG (494)

\*STS\* SS 2 /C?  
 USER:  
 1 and combined modality therapy

PROG:  
 SS (2) PSTG (70)

\*STS\* SS 3 /C?  
 USER:  
 finished

PROG:  
 SEARCH SET FROM SS 1 FORWARD SAVED AS '&-MFS-&'.  
 YOU ARE NOW CONNECTED TO THE BACK86 (1986 - 87) FILE.  
 SS (2) PSTG (91)  
 YOU ARE NOW CONNECTED TO THE BACK83 (1983 - 85) FILE.  
 SS (3) PSTG (8)  
 YOU ARE NOW CONNECTED TO THE CANCERLINE (CANCERLIT) FILE.  
 SS (4) PSTG (410)  
 THE FOLLOWING OUTPUT OPTIONS ARE POSSIBLE:  
 1 UNSORTED, SEPARATE (ONE SEARCH STATEMENT AT A TIME).  
 2 SORTED, SEPARATE.  
 ENTER A SINGLE NUMBER FROM THE PRECEDING MENU:

USER:                                   ● Because the sum of the search statements  
 2                                       is greater than 500, combining output is not  
                                      possible. Prompts # 3 and 4 which deal with  
                                      combining output, are therefore not given.

PROG:  
 SEARCH 1 WITH 70 ITEM(S) FROM MEDLINE IS NOW READY FOR SORTING.

ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:  
 jn1

PROG:  
 ENTER SPECIFICATIONS FOR PRINTING (E.G., BR, SD, FU, DL), OR 'SAME'  
 (DO NOT USE THE WORDS 'PRINT' OR 'PRT'):

USER:  
 compr

PROG:

1 (MEDLINE)

UI - 89287097  
 AU - Calvo FA ; Sierrases:umaga L ; Martin I ; Santos M ; Voltas J ;  
 Berian JM ; Ca:nadell J  
 TI - Intraoperative radiotherapy in the multidisciplinary treatment  
 of pediatric tumors. A preliminary report on initial results.  
 SO - Acta Oncol 1989;28(2):257-60

2 (MEDLINE)

UI - 88209346  
 AU - Maiche AG ; Lappalainen K ; Teerenhovi L  
 TI - Renal insufficiency in patients treated with high dose  
 methotrexate.  
 SO - Acta Oncol 1988;27(1):73-4

3 (MEDLINE)

UI - 88267870  
 AU - Baranzelli MC ; Gosselin P ; Cazin JL ; Lecomte-Houcke M ;  
 Bouretz JC ; Debeugny P ; Demaille MC  
 TI - [Experience with Rosen's T10 protocol at the Oscar Lambret  
 Center (Lille) from 1982 to 1985. Apropos of 13 cases of  
 non-metastatic osteosarcomas of the extremities]  
 SO - Ann Pediatr (Paris) 1988 Apr;35(4):253-9

4 (MEDLINE)

UI - 89087275  
 AU - Huth JF ; Eilber FR  
 TI - Patterns of recurrence after resection of osteosarcoma of the  
 extremity. Strategies for treatment of metastases.  
 SO - Arch Surg 1989 Jan;124(1):122-6

CONTINUE PRINTING? (YES/NO)

USER:

n

PROG:

SEARCH 2 WITH 91 ITEM(S) FROM BACK86 IS NOW READY FOR SORTING.

REPRINT PRIOR SEARCH RESULTS? (Y/N/C/SKIP PLUS OPTIONAL WORD(S)  
 'PRINTSPECS' AND/OR 'RECORDS' TO REQUEST PROMPTS FOR THESE CHANGES):

USER:

n

PROG:

ENTER SORT SPECIFICATIONS, 'SAME', OR 'NONE':

USER:

same

PROG:

1 (BACK86)

UI - 88020585  
 AU - Van Oyen PM ; Bergmans G ; Denys H ; Vergison R  
 TI - Primary osteogenic sarcoma of the bladder.  
 SO - Acta Urol Belg 1987;55(3):380-2

2 (BACK86)

UI - 88074583  
 AU - Newman NM ; DiLoreto DA  
 TI - Metastasis of primary osteogenic sarcoma to the eyelid.  
 SO - Am J Ophthalmol 1987 Dec 15;104(6):659-60



PROG:

1 (CANCERLINE)  
 AU - Kinsella TJ ; Rowland J ; Glatstein EJ  
 TI - PHASE I/II STUDY OF CONTINUOUS INTRAVENOUS IODODEOXYURIDINE  
 (IDURD) AND TWICE-DAILY IRRADIATION FOR UNRESECTABLE SARCOMAS  
 (MEETING ABSTRACT)  
 SI - ICDB/87028020  
 SO - Am J Clin Oncol; 9(2):113 1986

2 (CANCERLINE)  
 AU - Craft AW  
 TI - MANAGEMENT OF OSTEOSARCOMA (MEETING ABSTRACT)  
 SI - ICDB/89049890  
 SO - Br J Radiol; 61(728):730-1 1988

3 (CANCERLINE)  
 AU - Santoro A ; Bonadonna G  
 TI - SOFT TISSUE AND BONE SARCOMAS  
 SI - ICDB/87036534  
 SO - Cancer Chemother; 8:495-510 1986

4 (CANCERLINE)  
 AU - Harris MB ; Weiner MA ; Lewis M  
 TI - THE TREATMENT OF OSTEOGENIC SARCOMA (MEETING ABSTRACT)  
 SI - ICDB/87038433  
 SO - Cancer Invest; 4(5):19 1986

EXAMPLE 4 - Use of SORT and COMB keywords with MFS.

SS 1 /C?  
 USER:  Rather than requesting prompts for the output  
 mfs mode=auto sort comb options, SORT and COMB are entered as  
 keywords.

PROG:  
 SEARCH TO BE RUN ALREADY EXISTS. DO YOU WISH TO REPLACE IT? (Y/N)

USER:  
 y

PROG:  
 MULTIFILE SESSION ABOUT TO BEGIN  
 MODE: AUTO SORT COMBINED  ELHILL acknowledges requests.

SEARCHNAME: &-MFS-& (TO BE INPUT)  
 FILES TO BE SEARCHED:  
 \*\* MEDLINE (1988 - 89)  
 \*\* BACK86 (1986 - 87)  
 \*\* BACK83 (1983 - 85)  
 \*\* BACK80 (1980 - 82)  
 \*\* BACK77 (1977 - 79)  
 \*\* BACK72 (1972 - 76)  
 \*\* BACK66 (1966 - 71)  
 OK? (Y/N/C/LIST)

USER:  
 y

PROG:  
 ENTER SEARCH-  
 YOU ARE NOW CONNECTED TO THE MEDLINE (1988 - 89) FILE.

\*STS\* SS 1 /C?  
 USER:  
 \*raynaud's disease/di  
 PROG:  
 SS (1) PSTG (19)





VERSION 4.0

[Editor's Note: Each month the Technical Bulletin features a column of questions/answers concerning GRATEFUL MED. Contributions for this column will be appreciated.]

*Question: When I enter terms on the Subject Words line I often run out of room trying to include all the different forms of a word with a particular root. How can I overcome this?*

Answer: The answer is truncation. Our truncation symbol is the colon. The ":" stands for any number of characters to the right. Therefore, **regulat:** will retrieve the following:

- regulate
- regulated
- regulates
- regulating
- regulations
- regulative
- regulator
- regulators

The colon should be used with caution. If you use it too "soon" in the word you can end up retrieving too many words with that root, which could result in too broad a search.

We have another symbol, the "#" which is a single variable character symbol. It stands for only one character or space and is primarily used to retrieve both singular and plural forms of a word.

Consequently, **kidney#** will retrieve "kidney" or "kidneys."

It can also be used in the middle of a word to stand for a character, for example, **mari#uana** will retrieve "marijuana" or "marihuana."

(Note: **Tumo#r** would not be helpful because it will only retrieve "tumour," NOT "tumor.")

Don't forget to check the MeSH display (F10 key) for your term. If you find appropriate terms in the display, we recommend that you select them there.

*Question: When is prime time vs. non-prime time?*

Answer: Prime time is 10:00 am to 5:00 pm ET Monday to Friday. Non-prime time is all other times, plus Federal Holidays.

For a list of the observed dates of U.S. Federal Holidays see Appendix E.

FYI

Also in this issue in Appendices B, C, and D you will find our database update schedules for next year. If you want to update any searches, refer to this table for the appropriate dates. Please note that due to unforeseen problems these dates may be altered during the year. Delays are always announced in the online NEWS or broadcast messages.

VERSION 5.0 UPDATE NEWS

As in past years, NLM plans to distribute the up-coming new version of GRATEFUL MED (5.0) to purchasers of all earlier versions at no extra charge. However, in order to update our mailing list, this year we are preceding the mailing of the GRATEFUL MED update with a postage-paid card that must be returned to receive the free new version.

All current GRATEFUL MED users should be receiving this card in the next few weeks. When you receive yours, simply fill it out and drop it in the mail, and you will receive version 5.0 of GRATEFUL MED early in 1990.

A couple of technical notes about version 5.0:

- 1) The Random Access Memory (RAM) to run version 5.0 is increasing to 384K required, 512K recommended. This means that version 5.0 will not run on machines with less than 384K available memory. Version 4.0 will run with as little as 256K available.
- 2) Version 5.0 will most likely be the last GRATEFUL MED version to run on PC's without a hard disk. NLM will continue to support the use of Version 5.0 on floppies, however, even as later versions are released.

Continues New ELHILL Search Capabilities

2 (BACK72)

UI - 75051483

AU - Holm J ; Johns:en C ; Scherst:en T

TI - Thermography in vascular surgery. A preliminary report based on a study in 12 cases.

SO - Acta Chir Scand 1974;140(6):445-8

3 (BACK72)

UI - 77062106

AU - Nielsen SL

TI - Raynaud phenomenon in obliterative arterial disease on the upper extremity.

SO - Acta Chir Scand Suppl 1976;465:33-6

4 (BACK72)

UI - 77062111

AU - Thulesius O

TI - Methods for the evaluation of peripheral vascular function in the upper extremities.

SO - Acta Chir Scand Suppl 1976;465:53-4

.  
.  
.



## ELHILL 3.3A - Sorting and Combining Your Search Results Online

Dave Kenton,  
ELHILL Software Manager for the National Library of Medicine (NLM)

Fred Bone, RHM Computing,  
ELHILL Software Manager for the British Library (BL)

### Introduction

The National Library of Medicine is pleased to announce a mid-November implementation of the latest major change to its information retrieval system. ELHILL 3.3A is the fourth cooperative effort (see October and November 1988 *Technical Bulletin* articles) between the NLM and the British Library over the past dozen years in the field of information science and retrieval. It is hoped that this version will 'soften' the boundaries between databases and make the searching and printing of multiple databases easier, faster, and significantly cheaper. Your comments and suggestions are encouraged.

### Overview

The ELHILL 3.3A system is the logical extension of last year's enhancements; type EXPLAIN ELHILL 3.3 to receive more information on last year's changes and type EXPLAIN NEW FEATURES for this year's changes. ELHILL 3.3 introduces the following new capabilities:

1. To create much larger databases.
2. To sort search results online for printing.
3. To print continuously the results of several searches against one or more databases.

The first of these is invisible to the user. Changes have been made to the structure of the databases allowing for a greatly-increased depth of indexing and a doubling of the maximum number of citations that can be held in a single database. Some of the benefits resulting from these changes are:

1. MEDLINE will again become a three-year file in December 1989.

2. The limit on new Pre-Explodes will be lifted in December 1990.

Some future benefits will be:

1. Additional index points, such as textword searching on individual words in MeSH Headings, becomes possible.
2. Reduction of the number of MEDLINE (and other) Backfiles now becomes possible.

The other two changes relate to the presentation of search results, especially those resulting from Multi-File searching. Until now, the user could only display search results one database at a time and in a fixed order. ELHILL 3.2A (introduced in 1980) allowed the sorting of search results to be printed offline, but limited to one database. ELHILL 3.3A allows the user to collect together the results of searches against several databases and have them displayed online in any desired sequence.

### Major Changes

The new features are implemented mainly via changes in the SuperPrint (SPRINT) command. Of course, these features may also be selected when entering an MFSEARCH.

The following words have been introduced to request the new features:

1. SORTED (or SORT) specifies that the output is to be sorted before printing.
2. COMBINED (or COMB or CONTINUOUS or CONT) specifies that the output from more than one search is to be collected and printed as though it were a single search result. These words may be specified individually or in combination.

In MFSEARCH, SORTED and COMBINED are specified as additional options to MODE, as follows:

```
MFS MODE=SORT
(note the default MODE=MANUAL applies)
MFS MODE=TFILE, SORT
(individual searches will be sorted)
MFS MODE=AUTO, SORT, COMB
(all searches are sorted together)
```

In SPRINT, the words are specified as additional options following the list of search statements, as follows:

```
SPRINT 1-3, SORT
(search statements 1-3 sorted individually)
```

SPRINT ALL, COMB  
 (all searches combined but not sorted)  
 SPRINT 2,4-6 SORT COMB  
 (these searches sorted together)

**Discussion of SORT and COMB**

Specifying SORT will cause the system to prompt for "Sort Specifications" and to proceed to sort the selected search results before proceeding to the "Print Specifications" prompt. Sorting may be done on up to five fields (elements) in ascending or descending sequence by field, or on a predefined sort format (as for Offsearch and OFFLINE PRINT). Examples:

PROG:  
 ENTER SORT SPECIFICATIONS, 'SAME', OR  
 'NONE':  
 USER:  
 auti names a predefined Sort Format,  
 requesting author/title order.

PROG:  
 ENTER SORT SPECIFICATIONS, 'SAME', OR  
 'NONE':  
 USER:  
 dp desc, ta, au specifies Date-of-Publication  
 in descending order, and within that,  
 Journal Title abbreviation, and Author  
 both in ascending sequence.

'SAME' specifies re-use of the previous sort  
 specification.  
 'NONE' requests the system to bypass sorting  
 for this search result.

Following entry of Sort Specifications, the system proceeds to create a temporary search-set to hold the sorted search results. Up to 500 records may be sorted at one time.

Specifying COMB will cause the system to collect the requested search results into a temporary search-set. Up to 500 records may be so collected (if the user attempts to collect more than 500 records, the results may be displayed one search statement at a time). The temporary search will be printed as though it were a single search. In MFSEARCH MODE=AUTO, specifying COMB causes the system to print the results from all the databases without stopping between databases; thus, only one REPRINT? message is produced, after all the search results have been

displayed. This is especially useful when the search results are small.

If both SORT and COMB are specified, the system will collect and sort the requested search results into a temporary search-set. If the result set contains duplicate records from the same database (this cannot happen in MFS; it can occur only in SPRINT), these duplicates are eliminated before sorting, with an appropriate message. Again, up to 500 records may be processed. The entire set of results may thus be sorted and displayed as though from one large database.

Note: Although the system will not prevent the user from combining results from disparate databases, best results are obtained when similar files are combined or predefined sort-format and print-format names are used. Individual element names, when used in print or sort specifications, are evaluated once, against the 'senior' database (as defined by the NLM) in the list, as in Offsearch; hence, if the databases are not sufficiently similar, unpredictable results may be obtained.

**Additional Features: PROMPT and HOLD**

PROMPT: Especially in MFSEARCH, the user may not be sure before running the searches what quantity of results will be obtained, and hence whether the SORT and COMB options would be appropriate. For such situations the word PROMPT is provided. PROMPT, entered instead of SORT and/or COMB, causes the system to evaluate the options that are available based upon size of output, and give the user a chance to select from a menu before proceeding to Print, as follows:

PROG:  
 THE FOLLOWING OUTPUT OPTIONS ARE  
 AVAILABLE:  
 1 UNSORTED, SEPARATE (ONE SEARCH  
 STATEMENT AT A TIME).  
 2 SORTED, SEPARATE.  
 3 UNSORTED, COMBINED (ALL SEARCH  
 STATEMENTS TOGETHER).  
 4 SORT, COMBINED.  
 ENTER A SINGLE NUMBER FROM THE  
 PRECEDING MENU:  
 USER:

The menu will always include options 1 and 2; options 3 and 4 will depend on the size of the search results. If every search contains too many records to be sorted, no menu is provided; instead the system reports:

YOUR REQUEST WILL BE PROCESSED UNSORTED, ONE SEARCH STATEMENT AT A TIME.

HOLD: As explained earlier, use of the SORT and COMB options will create a temporary search statement, which the system deletes when the user answers "NO" (or SKIP or CANCEL) to the REPRINT? prompt. In some cases the user may wish to retain this search for further examination in the same session. For these cases the word HOLD is provided. HOLD may be specified together with SORT and/or COMB. It causes the system to retain the created search statement: when the user answers "NO" to a REPRINT? prompt, the system will produce the familiar "SS (n) PSTG (n)" message to show the search has been retained. (Note that this search result can only be used in SPRINT and PRINT commands and not for boolean logic; and cannot be saved as part of a Savesearch).

In order not to have to decide in advance whether these temporary results should be kept, the system also allows the user to specify HOLD as an additional option after NO (or SKIP or CANCEL) when responding to the REPRINT? prompt. Of course, HOLD only applies when dealing with temporary (SORT or COMB) search results. Conversely, if the user specified HOLD in the MFS or SPRINT command, the REPRINT? prompt will accept NOHOLD to override this. In both cases, the override applies only to the current (just-printed) result set.

Examples:

USER:  
mfs mode=auto,sort,comb,hold

. (search is run; results from 7 files sorted and  
. printed)

PROG:  
REPRINT PRIOR SEARCH RESULTS?  
(Y/N/C/SKIP) ...

USER:

no

PROG:

SS (8) PSTG (387) signifying that the search was retained

SUPERPRINT COMPLETED.

SS 9/C?

USER:

mfs mode=auto,sort

. (search is run; results from first database sorted  
. and printed)

PROG:  
REPRINT PRIOR SEARCH RESULTS?  
(Y/N/C/SKIP) ...

USER:

no, hold

PROG:

SS (8) PSTG (17) signifying the search was retained

SEARCH 2 WITH 9 ITEM(S) FROM BACK86 IS NOW READY FOR SORTING.

OK? (Y/N/C/SKIP)

USER:

y

PROG:

. (results from second database sorted and  
. printed)

PROG:  
REPRINT PRIOR SEARCH RESULTS?  
(Y/N/C/SKIP) ...

USER:

no search not retained because HOLD not specified

PROG:

SEARCH 3 WITH ...

. (...etc.)

USER:

mfs mode=auto,sort,hold

. (search is run; results from first database sorted  
. and printed)

PROG:  
REPRINT PRIOR SEARCH RESULTS?  
(Y/N/C/SKIP) ...

USER:

no

HOLD from MFS command takes effect

PROG:

SS (8) PSTG (17) signifying the search was retained

SEARCH 2 WITH 9 ITEM(S) FROM BACK86 IS  
NOW READY FOR SORTING. OK? (Y/N/C/SKIP)

USER:

y

PROG:

.  
.  
 (results from second database sorted and  
printed)

PROG:

REPRINT PRIOR SEARCH RESULTS?  
(Y/N/C/SKIP) ...

USER:

no, nohold search not retained: HOLD (in MFS  
command) overridden

PROG:

SEARCH 3 WITH ...

.  
 (...etc.)  
.

#### Other changes to the system

##### Changed command: PRINT

PRINT now copes with collections of postings from more than one database. This applies both to printing single multi-database search statements (derived from SPRINT) and to printing multiple search statements derived from different files ("PRINT SS 1, SS 3").

When switching files to print, the system no longer issues the "YOU ARE NOW CONNECTED" message; instead, the database name appears following the relative-record-number before each citation. This happens any time there is room for doubt as to where a record comes from: any time results exist from more than one database, or even from only one where this is different from the current search database.

When printing a multi-database result set, the system has to choose one file against which to evaluate print specifications (as with Offsearch). It will choose the "senior" file, as determined by the order of databases specified for DBclass 1. In most cases this will be MEDLINE or one of its backfiles, when present. The user will be informed which database is being used. Predefined print-formats, when used without INCLUDE or EXCLUDE, will be re-evaluated for each record.

Note that only online printing is allowed against mixed-database lists. A sorted list may be printed offline provided it is from a single database.

##### Changed command: DISPLAY

Kept search results created by the SORT and/or COMB options will be displayed in the format:

(SORT SS 1 OR SS 2 OR SS 3) -- 387 ITEM(S)  
FOUND IN MORE THAN ONE DATABASE  
and/or  
(COMBINED SS 1 OR SS 2) -- ... (etc)

## MeSH Publications Delay: Impact on Searching

Delivery of the printed 1990 MeSH tools (Annotated MeSH, Tree Structures, and Permuted MeSH) has been delayed until late November or early December. A series of unanticipated delays has occurred at nearly every step in the production operation from the NLM to the award of a printing contract at the Government Printing Office. NLM still expects to begin using 1990 MeSH according to the normal schedule, i.e., for the January 1990 update to MEDLINE/SDILINE. This affects all online searchers and NLM regrets the inconvenience to each of you. Of particular concern is the window of time for revising SDILINE Automatic SDI's which runs from November 20-30. As an interim measure until the tools are in your hands, NLM is offering the following:

### For the new 1990 MeSH Headings:

Send a self-addressed mailing label (no postage necessary) to:

Public Information Office  
Attention: MeSH LIST  
National Library of Medicine  
8600 Rockville Pike  
Bethesda, Maryland 20894

In return, you will receive a list of the 413 MeSH Headings that are new for 1990 so that you can review them for inclusion in your strategies.

Alternatively, you may search the 1990 MeSH file online and order an offline print of the 413 new headings. All online searching of and offline prints from the 1990 MeSH file will be free during November and December. The following search strategy should be used to retrieve MeSH headings new for 1990 from file NEW MESH and print the retrieval offline.

SS 1 /C?  
USER:  
FILE NEW MESH

PROG:  
YOU ARE NOW CONNECTED TO THE NEW  
MESH VOCABULARY (1990) FILE.

SS 1 /C?  
USER:  
D (RY)

PROG:  
SS (1) PSTG (15846)

SS 2 /C?  
USER:  
1 AND FROM 890101 TO 891231 (DA)

PROG:  
SS (2) PSTG (413)

SS 3 /C?  
PRT DL INDENTED OFFLINE 1-300

.  
. .  
. .

SS 3/C?  
PRT DL INDENTED OFFLINE 301-413

(Up to 300 citations may be requested in a single OFFLINE PRINT request. Therefore, a second OFFLINE PRINT command is necessary to capture the remaining 113 headings).

If you need information on tree numbers, your only solution is to search the NEW MESH file online. Please be aware that the TREE and MESHNO commands operate from a special file containing the current year's headings and tree numbers. Until December 11, the "current year" is 1989 MeSH. Even if you are connected to FILE NEW MESH and issue these commands the results given will be for 1989 vocabulary.

### For the changed headings

For those headings that existed in previous years but now have a new form for 1990, NLM has analyzed them and a summary is provided here. Of the approximately 80 changed headings, most of the old forms have been retained as see references to the new forms and there is no impact on your search strategies. However, 5 headings can no longer be used in searching qualified as (MH). See Figure 1.

Old Heading	New Heading
BENZIODARONE	BENZIODARONE (NM) or BENZOFURANS (MH)
CLIDANAC	CLIDANAC (NM) or INDANS (MH)
CORNEAL DYSTROPHIES	CORNEAL DYSTROPHIES, HEREDITARY
LYMPHOTOXINS	LYMPHOTOXIN
TUBERCULOSIS IN CHILDHOOD	TUBERCULOSIS, PULMONARY

Figure 1

The first two were MeSH Headings and now are supplementary chemicals which must be qualified by (NM) meaning Name of Substance for searching. To search these two chemicals as MeSH Headings for 1990,

you must use the broader class names as listed rather than the specific names. In addition, 3 Non-MeSH Headings have become MeSH Headings and now can be used in online searching as a single heading. See Figure 2.

Old Heading	New Heading
EYE ABNORMALITIES (NON-MESH)	EYE ABNORMALITIES
GRAM-POSITIVE ASPOROGENOUS RODS (NON-MESH)	GRAM-POSITIVE ASPOROGENOUS RODS
PUPIL REACTIONS, ABNORMAL (NON MESH)	PUPILLARY FUNCTIONS, ABNORMAL

Figure 2

## Year-End Processing - 1990 MeSH & Automatic SDI's

Note: Each year in the late summer and during the fall, staff of NLM's Office of Computer and Communications Systems and the MEDLARS Management Section perform substantial work making changes to MEDLINE, its Backfiles, and other databases to reflect changes in the Medical Subject Headings (MeSH) vocabulary. This internal work, called "year-end processing," largely goes unnoticed as it proceeds but is apparent each year when the databases that use MeSH appear as "class-maintained" thus reflecting the dynamic nature of MeSH as well as the vocabulary of medicine. NLM also makes other changes as required to database records. Information for searchers on important dates as the operational MeSH vocabulary used for indexing and searching is changed to reflect 1990 MeSH is included in this article. Some searchers will have to make changes to some of their stored searches used for current awareness retrieval in NLM's Automatic SDI program. Generally, GRATEFUL MED users do not have to take any direct actions and may be assured that the annual changes to the vocabulary and other changes made to NLM databases should only facilitate search retrieval.

### 1990 MESH

The 1990 MEDLINE and HEALTH files are expected to be available online with January 1990, 9001 Entry Month (EM) data on Monday, December 11, 1989. The CANCERLIT December 1989, 8912 (EM) update will be available online on December 11, 1989 with 1990 MeSH vocabulary. CATLINE and AVLINE are also expected to be updated with 1990 vocabulary on December 11, 1989. At that time, all searches using MeSH should conform to any changes introduced with the Medical Subject Headings, 1990. AIDSLINE is expected to be updated with 1990 vocabulary sometime after December 11, 1989. Other files using MeSH vocabulary (i.e., BIOETHICS, POPLINE, TOXLINE, and DENTALPROJ) will be maintained for 1990 vocabulary at later dates. Watch future issues of the *Technical Bulletin* and the online NEWS for announcements.

Changes to the MeSH vocabulary for 1990 are reflected in the various lists contained in the introduction to the Medical Subject Headings--Annotated Alphabetic List, 1990. This publication is available from the National Technical Information Service (NTIS); ordering

information was provided in the August 1989 *Technical Bulletin*.

GRATEFUL MED 1990 MeSH disks along with Version 5.0 (IBM) are expected to be mailed in February. A postcard is being mailed to all Version 4.0 users; it must be returned in order to receive GRATEFUL MED Version 5.0.

### STORESEARCHES, AUTOMATIC SDIS, AND SAVED SEARCHES

All stored searches (including Automatic SDI stored searches) and saved searches for the ELHILL databases should be reviewed. Searchers should review these searches for the impact of any changed and new 1990 MeSH headings (MH), as usual. A new Title Field Text Word (TF) capability is available for 1990 in AIDSLINE, CATLINE and AVLINE which searchers may want to use. This TF capability makes it possible to Text Word search exclusively on words in the title using the (TF) qualifier instead of (TW), which includes words from the title and abstract. The summary of the year-end processing schedule is found on pages 34-35 of this issue.

### SDILINE AUTOMATIC SDI SEARCHES - MEDLINE DATABASE

SDILINE Automatic SDI stored searches requiring revision due to 1990 MeSH vocabulary changes must be deleted and restored by Thursday, November 30, 1989, in order to receive correct retrieval against 1990 monthly updates. The January 9001 (EM) SDILINE SDIs will be processed beginning on or about Friday, December 1, 1989, rather than late November. Searchers should execute their STORESEARCHES themselves online between November 20, 1989, and November 30, 1989, to examine retrieval. Please note that this time period is only 11 calendar days long. During this time, the December 1989 SDILINE file will contain 1990 MeSH terms so searchers can run their STORESEARCHES against this revised SDILINE to check correct operation of stored strategies against the new vocabulary. Only SDILINE will have 1990 vocabulary terms on citations during this time period; MEDLINE and other databases will not.

In order to check correct operation of stored searches during this designated period, searchers should:

1. First, record the number of citations retrieved for each stored search as processed by NLM in the

Automatic SDI Program for the December 1989 SDILINE (available October 28) with the 1989 vocabulary. (The number of citations retrieved is listed on the front of each SDI printout received. The name of the stored search is the title of the printout.)

2. Beginning November 20, searchers should go online and run each SDILINE stored search against the December SDILINE, which will contain the same number of citations but will then instead reflect 1990 MeSH vocabulary. (Stored searches may be executed by typing the stored search name online qualified by (SN). Be connected to SDILINE.)

3. Compare the postings retrieved with the records found earlier. If the number of citations (i.e., postings) retrieved is not equal to the number received in the December 1989 SDILINE printouts with 1989 vocabulary, searchers may assume the stored search has been affected by a 1990 vocabulary change.

4. Searchers should then display the strategy (use the command DISPLAY with the stored search name, but without the (SN)). Review the list of new 1990 MeSH headings. Some of these new MeSH headings may be pertinent to the search strategies being reviewed. As a result of the 1990 MeSH publication delay, the list of new headings may be requested by mail or retrieved through an offline print from the NEW MESH file. (For details see "MeSH Publications Delay: Impact on Searching" in this issue, page 29). Also, remember to check CAS Registry Numbers and tree numbers in the NEW MESH FILE (details on page 29). If the strategies are not too long, searchers may want to type them in line-by-line and evaluate any No Postings messages to isolate problem areas.

5. Purge searches requiring changes (PURGESEARCH searchname) and store the revised strategy (STORESEARCH). If you purge and store on the same day, be sure to make the searchname of the new search different. Varying the name of the search by one character from the old name is sufficient to make the new name unique.

6. All revised SDILINE search strategies for Automatic SDILINE processing should be stored by November 30, so they will be correct for the next processing cycle (see the following paragraphs).

#### **Billing for Automatic SDIs on SDILINE November/December 1989.**

Because of the two updates of SDILINE in the month of December 1989 (9001 (EM) and 9002 (EM)), participants in the Automatic SDI program should expect to see charges for two sets of SDILINE Automatic SDIs on their December invoices. However, no SDILINE Automatic SDIs will be run in November 1989. Therefore, participants in the Automatic SDI program should expect to see no charges for SDILINE Automatic SDIs on their November invoices. Because the 9002 (EM) Automatic SDI searches will be processed by NLM during the weekend of December 30, some execution charges and page charges may be reflected on December invoices while others may be recorded on January invoices.

#### **OTHER DATABASES WITH SDI SERVICE**

Other files which have Automatic SDI service are HEALTH, CANCERLIT, CATLINE, AVLINE, AIDSLINE, POPLINE, and TOXLINE. These do not have an equivalent of SDILINE, therefore it is not possible to follow the procedures described for MEDLINE's SDILINE for these databases. You should carefully review any strategies you may have stored for execution by NLM against these databases for possible vocabulary revisions and restore by the dates listed below.

#### **HEALTH and CANCERLIT SDIs**

The HEALTH and CANCERLIT databases are also expected to be updated with 1990 vocabulary on December 11, 1989. Review and restore any affected searches by December 7. The HEALTH update expected on December 11 is 9001 (EM); the CANCERLIT update is 8912 (EM). Both of these updates will use 1990 MeSH vocabulary. NLM plans to run these Automatic SDIs during the week of December 11.

#### **CATLINE AND AVLINE AUTOMATIC SDIs**

The CATLINE and AVLINE databases are also expected to be updated with 1990 vocabulary on December 11, 1989. Changes for Automatic SDIs run against these databases should be made no later than December 28, 1989. The new TF (Title Field Textwords) capability may be useful.



#### AIDSLINE SDIs

AIDSLINE is expected to be updated with 1990 vocabulary sometime after December 11, 1989. Changes for Automatic SDIs run against AIDSLINE should be made no later than December 8, 1989. The new TF (Title Field Text Words) capability may be useful.

#### POPLINE SDIs

POPLINE SDIs should not be changed yet. Please see future issues of the NLM *Technical Bulletin* and the online NEWS for announcements about the 1990 vocabulary.

#### TOXLINE SDIs

TOXLINE contains MeSH vocabulary on the TOXBIB and BIOSIS subfiles. Stored search strategies for TOXLINE that contain MeSH headings should be reviewed for 1990 MeSH vocabulary changes. Any changes to these strategies should be reviewed and restored by December 12, 1989. Beginning with the TOXLINE update in December (8912 (EM)), records added to both the TOXBIB and the BIOSIS subfiles will contain 1990 MeSH. 1989 MeSH terms will remain on TOXBIB and BIOSIS records from earlier entry months until the entire TOXLINE file is regenerated sometime in February 1990. Watch the online ELHILL news and the *Technical Bulletin* for the date of the regeneration.

YEAR-END PROCESSING SCHEDULE

- October 28, 1989:** December 1989 MEDLINE/SDILINE 8912 (EM) with 1989 MeSH vocabulary available online.
- November 18-19, 1989:** SDILINE unavailable online in order to implement this database with 1990 vocabulary.
- November 20, 1989:** December 1989 SDILINE with 1990 MeSH terms available online. STORESEARCHes should be executed online. December SDILINE available through December 8, 1989, but all stored searches used for Automatic SDIs against SDILINE with any necessary changes should be corrected and restored for processing by NLM by **November 30**.
- December 1, 1989:** SDILINE Automatic SDIs will be processed by NLM against January 1990 (9001 (EM)) data beginning on or about this date.
- December 7, 1989:** HEALTH and CANCERLIT Automatic SDIs with identified changes should be corrected and restored by this date.
- December 9-10, 1989:** The NLM computer will be unavailable for searching over this weekend so that the 1990 MEDLINE/SDILINE/HEALTH/CANCERLIT databases and MEDLINE Backfiles may be installed. PDQ and DOCLINE will also be down. (The TOXNET computer is unaffected.)  
 Note: If the installation of the 1990 databases proceeds smoothly, it is possible that the computer will be brought back online early, that is on either December 9 or 10, with the 1990 databases ready for searching. These dates are provided as guidelines so searching schedules may be planned.
- December 11, 1989:** Class Maintained 9001 (EM) MEDLINE/HEALTH databases available online with January 1990 updates. 9001 (EM) SDILINE available online. The CANCERLIT database Class-Maintained and updated through 8912 (EM) should also be available online on this date. These databases and the MEDLINE Backfiles should then be searched using the 1990 MeSH vocabulary.
- December 11, 1989:** HEALTH Automatic SDIs will be processed by NLM against January 1990 (9001 (EM)) data beginning on this date, followed by CANCERLIT Automatic SDI processing against the December 1989 update data.

**December 29, 1989:**

The CATLINE and AVLINE Automatic SDIs will be processed for the first time using 1990 vocabulary the first week in January. Please purge and restore any strategies affected by 1990 MeSH changes by this date.

**December 29, 1989:**

The SDILINE 9002 (EM) Automatic SDIs will be processed.

# Serials Update

## INDEXED TITLES UPDATE, OCTOBER 1989

The following titles cited in MEDLINE, HEALTH, and POPLINE have recently been selected for indexing, undergone a title change, or ceased publication. This list is not cumulative; the information provided is only for titles whose status has changed since the

last UPDATE. More detailed information may be found in SERLINE. For further information, please contact MMS or Ms. Esther Baldinger, (301) 496-1276, Technical Services Division, NLM.

### TITLES SELECTED FOR INDEXING, SEPTEMBER 1989

- |   |   |
|---|---|
| <p>HLI HEALTHCARE BOTTOM LINE<br/>HEALTHC BOTTOM LINE<br/>1,1984?--<br/>WILLIAM O. CLEVERLEY<br/>COLUMBUS OH UNITED STATES<br/>NLM COLLECTS V6N1,1989-<br/>INDEXING BEGAN WITH V6N1,FEB 1989.<br/>ON ORDER<br/>SR0066457 JC: AGR<br/>HEALTHCARE BOTTOM LINE,859 GREENRIDGE<br/>RD.,COLUMBUS OH 43235</p>                              | <p>IDL JOURNAL OF VETERINARY DENTISTRY<br/>J VET DENT<br/>5N3,JUN 1988--<br/>AMERICAN VETERINARY DENTAL SOCIETY<br/>BOISE ID UNITED STATES<br/>THIS TITLE IS NOT IN THE NLM COLLECTION.<br/>CONTINUES: VETERINARY DENTISTRY, WHICH IS<br/>NOT IN THE NLM COLLECTION.<br/>INDEXING BEGAN WITH V5N3,SEP 1988.<br/>ADA 0898-7564<br/>SR0063267 JC: AHJ<br/>110 N. ORCHARD ST.,BOISE ID 83706</p> |
| <p>HLI HEC FORUM<br/>HEC FORUM<br/>1,1989--<br/>PERGAMON PRESS<br/>OXFORD ENGLAND<br/>AN INTERDISCIPLINARY JOURNAL ON HOSPITALS<br/>ETHICAL AND LEGAL ISSUES.<br/>INDEXING BEGAN WITH V1N1,1989.<br/>ON ORDER 0956-2737<br/>SR0066011 JC: AHA</p>   | <p>HLI NEW JERSEY HEALTHCARE<br/>N J HEALTHC<br/>1N1,JAN/FEB 1988--<br/>NEW JERSEY HOSPITAL ASSOCIATION<br/>PRINCETON NJ UNITED STATES<br/>CONTINUES: NJHA REPORTER, WHICH IS NOT IN<br/>THE NLM COLLECTION. OFFICIAL PUBLICATION<br/>OF THE NEW JERSEY HOSPITAL ASSOCIATION.<br/>INDEXING BEGAN WITH V1N1,1988<br/>W1 NE446GM<br/>SR0065602 JC: AGZ</p>                                      |
| <p>POP INTERNATIONAL JOURNAL OF GYNECOLOGY AND<br/>OBSTETRICS. SUPPLEMENT</p> <p>IM INT J GYNECOL OBSTET SUPPL<br/>1,1989--<br/>ELSEVIER<br/>LIMERICK IRELAND<br/>INDEXING BEGAN WITH V1,1989.<br/>IN PROCESS<br/>SR0066552 JC: AHM</p>   | <p>HLI PART B NEWS<br/>PART B NEWS<br/>1N1,1989--<br/>UNITED COMMUNICATIONS GROUP<br/>BETHESDA MD UNITED STATES<br/>INDEXING BEGAN WITH V1N1,1989.<br/>ON ORDER 0893-8121<br/>SR0066500 JC: AHE</p>   |
| <p>HLI JOURNAL OF PHARMACY TECHNOLOGY<br/>J PHARM TECHNOL<br/>1N1,JAN/FEB 1985--<br/>HARVEY WHITNEY BOOKS<br/>CINCINNATI OH UNITED STATES<br/>OFFICIAL PUBLICATION OF THE ASSOCIATION OF<br/>PHARMACY TECHNICIANS.<br/>INDEXING BEGAN WITH V5N1,JAN-FEB 1989.<br/>W1 J0831C 8755-1225<br/>SR0052103 JC: AG1</p>                       | <p>HLI QA REVIEW<br/>QA REV<br/>1N1,AUG 1989--<br/>AMERICAN MEDICAL ASSOCIATION<br/>CHICAGO IL UNITED STATES<br/>INDEXING BEGAN WITH V1N1,AUG 1989.<br/>IN PROCESS<br/>SR0066255 JC: AHD</p>  |
| <p>IDL JOURNAL OF PIERRE FAUCHARD ACADEMY<br/>J PIERRE FAUCHARD ACAD<br/>1N1,MAR 1987--<br/>PIERRE FAUCHARD ACADEMY<br/>NEW DELHI INDIA<br/>CAPTION TITLE: JOURNAL OF PIERRE FAUCHARD<br/>ACADEMY, INDIA SECTION. RUNNING TITLE:<br/>JPFA.<br/>INDEXING BEGAN WITH V1N2,JUN 1987.<br/>W1 J0837ABH 0970-2199<br/>SR0060752 JC: AHK</p> |   |

TITLE CHANGES, SEPTEMBER 1989

IM JAHRESBERICHT / SCHWEIZERISCHE AKADEMIE DER  
MEDIZINISCHEN WISSENSCHAFTEN  
JAHRESBER SCHWEIZ AKAD MED WISS  
1988--  
SCHWABE  
BASEL SWITZERLAND  
CONTINUES: BULLETIN DER SCHWEIZERISCHEN  
AKADEMIE DER MEDIZINISCHEN WISSENSCHAFTEN.  
IN PROCESS  
SR0066496 JC: AHL

TITLES NO LONGER INDEXED AS OF SEPTEMBER 1989

INI REGISTERED NURSE  
REGIST NURSE  
IN1,FEB 1989-IN2,MAY 1989  
BCS COMMUNICATIONS  
TORONTO CANADA  
INDEXING BEGAN WITH VIN1,FEB 1989.  
W1 RE173CQ 0840-8831  
SR0065206 JC: RB2

<u>Pre-Explosion Name (PX)</u>	<u>Tree Number where Subsumed Terms may be Found</u>
ABNORMALITIES	C16.131
ANTIBIOTICS	D20.85
ANTIBODIES	D24.611.125
BACTERIA	B3
BACTERIAL INFECTIONS	C1.252
BEHAVIOR	F1.145
BEHAVIOR A#D BEHAVIOR MECHANISMS	F1
BEHAVIORIAL A#D MENTAL DISORDERS	F3
BIOCHEM PHENOM METAB	G6
BLOOD PROTEINS	D12.776.124
BRAIN	A8.186.211
CARBOHYDRATES	D9.203
CARDIOVASCULAR AGENTS	D18
CARDIOVASCULAR DISEASES	C14
CARDIOVASCULAR SYSTEM	A7
CELLS	A11
CENTRAL NERVOUS SYSTEM	A8.186
CENTRAL NERVOUS SYSTEM DISEASES	C10.228
CHEMISTRY, ANALYTICAL	E5.196
CIRCULATORY, RESPIRATORY PHYSIOLOGY	G9
DENTISTRY	E6
DIAGNOSIS, LABORATORY	E1.223
DIGESTIVE SYSTEM DISEASES	C6
ENZYMES	D8.586
EQUIPMENT A#D SUPPLIES	E7
GASTROINTESTINAL DISEASES	C6.405
GENETICS	G5
HEALTH FACILITIES	N2.278
HEALTH SERVICES	N2.421
HEART DISEASES	C14.280
HORMONES	D6.472
IMMUNITY	G4.610
IMMUNOLOGIC FACTORS	D24.611
LIPIDS	D10.516
MAMMALS	B2.649
MENTAL DISORDERS	F3.709
METABOLIC DISEASES	C18.452
METALS	D1.552
MISCELLANEOUS TECHNIQS	E5
MUSCULOSKELETAL DISEASES	C5
NEOPLASMS	C4
NERVOUS SYSTEM	A8
NERVOUS SYSTEM DISEASES	C10
NEUROLOGIC MANIFESTATIONS	C10.597
ORGANIZATION A#D ADMINISTRATION	N4.452
PHYSIOLOGY, GENERAL	G7
PROTEINS	D12.776
PSYCHOLOGIC PROCESSES PRINCIPLES	F2
REPRODUCTION, UROGENITAL PHYSIOLOGY	G8
RESPIRATORY TRACT DISEASES	C8
RODENTIA	B2.649.865
SIGNS A#D SYMPTOMS	C23.888
SKIN DISEASES	C17
STEROIDS	D4.808
STOMATOGNATHIC DISEASES	C7
SURGERY, OPERATIVE	E4
UNITED STATES MC (as a MeSH heading)	Z1.107.567.875
UNITED STATES (as a place of publication)	Z1.107.567.875
VASCULAR DISEASES	C14.907
VERTEBRATE VIRUSES	B4.909
VERTEBRATES	B2
VIRUS DISEASES	C2
VIRUSES	B4
WOUNDS A#D INJURIES	C21.866

Pre-Explosions are searchable only by the Pre-Explosion Name (PX) or  
 \*Pre-Explosion Name (PX) and not by the tree number.

1990 SEMI-MONTHLY UPDATE SCHEDULE FOR MEDLINE

<u>ENTRY MONTH</u>	<u>UPDATED MEDLINE AVAILABLE</u>	<u>DATE OF ENTRY (DA) RANGE*</u>
9001 (EM)	DEC 11	FROM 891027 TO 891122 (DA)
9002 (EM)	DEC 30	FROM 891123 TO 891221 (DA)
9003 (EM)		
Part 1	JAN 13	FROM 891222 TO 900111 (DA)
Part 2	JAN 27	FROM 900112 TO 900125 (DA)
9004 (EM)		
Part 1	FEB 10	FROM 900126 TO 900208 (DA)
Part 2	FEB 24	FROM 900209 TO 900222 (DA)
9005 (EM)		
Part 1	MAR 17	FROM 900223 TO 900315 (DA)
Part 2	MAR 31	FROM 900316 TO 900329 (DA)
9006 (EM)		
Part 1	APR 14	FROM 900330 TO 900412 (DA)
Part 2	APR 28	FROM 900413 TO 900426 (DA)
9007 (EM)		
Part 1	MAY 12	FROM 900427 TO 900510 (DA)
Part 2	MAY 26	FROM 900511 TO 900524 (DA)
9008 (EM)		
Part 1	JUN 16	FROM 900525 TO 900614 (DA)
Part 2	JUN 30	FROM 900615 TO 900628 (DA)
9009 (EM)		
Part 1	JUL 14	FROM 900629 TO 900712 (DA)
Part 2	JUL 28	FROM 900713 TO 900726 (DA)
9010 (EM)		
Part 1	AUG 11	FROM 900727 TO 900809 (DA)
Part 2	AUG 25	FROM 900810 TO 900823 (DA)
9011 (EM)		
Part 1	SEP 15	FROM 900824 TO 900913 (DA)
Part 2	SEP 29	FROM 900914 TO 900927 (DA)
9012 (EM)		
Part 1	OCT 13	FROM 900928 TO 901011 (DA)
Part 2	OCT 27	FROM 901012 TO 901025 (DA)

See reverse for Search Hint. For routine monthly updates of selected other NLM databases, see the "1990 Monthly Update Schedule for NLM Databases." For the AIDSLINE updates, see the separate sheet labelled "1990 Update Schedule for AIDSLINE."

Search Hint:

Pretend that a search is run against MEDLINE on April 20. The first part of the 9006 (EM) is online then. But the patron wants current awareness service based on the semi-monthly updates. How can one repeat the search after April 28 and NOT get citations from the first half of 9006 (EM) again? This is how using information from the above chart:

SS 1: subject strategy  
SS 2: 1 AND 9006 (EM)  
SS 3: 2 AND FROM 900413 to 900426 (DA)

MMS recommends a ranging instruction after ANDing with the Entry Month of interest. Prefer a 'FROM - TO -' ranging instruction (remembering that it is inclusive, i.e., searches for and includes the dates in the instruction) over a 'GREATER THAN' instruction. Ranging should only be necessary when the first half of an Entry Month needs to be excluded.

The same search run after May 12 but before May 26 is entered:

SS 1: subject strategy AND 9007 (EM)

The same search run after May 26 is entered:

SS 1: subject strategy  
SS 2: 1 AND 9007 (EM)  
SS 3: 2 AND FROM 900511 to 900524 (DA)

And so the pattern repeats.



## 1990 MONTHLY UPDATE SCHEDULE FOR NLM DATABASES

<u>ENTRY MONTH</u>	<u>UPDATED SDILINE AVAILABLE</u>	<u>UPDATED HEALTH AVAILABLE</u>	<u>UPDATED POPLINE AVAILABLE</u>	<u>UPDATED CANCERLIT AVAILABLE</u>	<u>UPDATED TOXLINE/ TOXLIT AVAILABLE</u>
9001 (EM)	DEC 11	DEC 11	JAN 6	JAN 6	JAN 13
9002 (EM)	DEC 30	JAN 6	FEB 3	FEB 3	FEB 10
9003 (EM)	JAN 27	FEB 3	MAR 3	MAR 3	MAR 10
9004 (EM)	FEB 24	MAR 3	APR 7	APR 7	APR 14
9005 (EM)	MAR 31	APR 7	MAY 5	MAY 5	MAY 12
9006 (EM)	APR 28	MAY 5	JUN 2	JUN 2	JUN 9
9007 (EM)	MAY 26	JUN 2	JUL 7	JUL 7	JUL 14
9008 (EM)	JUN 30	JUL 7	AUG 4	AUG 4	AUG 11
9009 (EM)	JUL 28	AUG 4	SEP 1	SEP 1	SEP 8
9010 (EM)	AUG 25	SEP 1	OCT 6	OCT 6	OCT 13
9011 (EM)	SEP 29	OCT 6	NOV 3	NOV 3	NOV 10
9012 (EM)	OCT 27	NOV 3	DEC 17	DEC 10	DEC 17

December updates for POPLINE, CANCERLIT, AND TOXLINE/TOXLIT are subject to change.

For MEDLINE updates, see the "1990 Semi-monthly Update Schedule for MEDLINE."

For AIDSLINE updates, see the "1990 Update Schedule for AIDSLINE."

1990 UPDATE SCHEDULE FOR AIDSLINE

<u>ENTRY MONTH</u>	<u>UPDATED AIDSLINE AVAILABLE</u>
9001 (EM)	DEC 12
9002 (EM)	JAN 9
9003 (EM) Part 1	JAN 13
Part 2	JAN 27
Part 3	FEB 6
9004 (EM) Part 1	FEB 10
Part 2	FEB 24
Part 3	MAR 6
9005 (EM) Part 1	MAR 17
Part 2	MAR 31
Part 3	APR 10
9006 (EM) Part 1	APR 14
Part 2	APR 28
Part 3	MAY 8
9007 (EM) Part 1	MAY 12
Part 2	MAY 26
Part 3	JUN 5
9008 (EM) Part 1	JUN 16
Part 2	JUN 30
Part 3	JUL 10
9009 (EM) Part 1	JUL 14
Part 2	JUL 28
Part 3	AUG 7
9010 (EM) Part 1	AUG 11
Part 2	AUG 25
Part 3	SEP 4
9011 (EM) Part 1	SEP 15
Part 2	SEP 29
Part 3	OCT 9
9012 (EM) Part 1	OCT 13
Part 2	OCT 27
Part 3	NOV 6

Parts 1 and 2 are the MEDLINE-derived data.  
 Part 3 is the HEALTH-derived and CANCERLIT-derived data.

1990  
COMPUTER HOLIDAY SCHEDULE

Listed below is the computer holiday schedule for the ELHILL system of databases and PDQ for Christmas 1989 as well as the entire calendar year of 1990. The NLM computer is scheduled to be UP on every holiday listed below. The available NLM computer hours are shown as either guaranteed or non-guaranteed. Guaranteed means that the computer center is staffed and in the event of a computer shutdown, the computer will be restarted. Non-guaranteed means that the computer center is not staffed and in the event of an unexpected computer shutdown the system will not be restarted until 11:00 PM prior to the next NLM workday. Specific details on guaranteed versus non-guaranteed hours of operation for each holiday will be published prior to that holiday in the NLM Technical Bulletin. "Observed" means U.S. Federal government observance of the holiday. Non-prime rates will be in effect on non-guaranteed holidays and on guaranteed holidays when the MEDLARS Management Service Desk is not staffed.

HOLIDAY	DATE	SYSTEM STATUS
Christmas Day (1989)	Mon, Dec 25	Non-guaranteed*
New Year's Day	Mon, Jan 1	Non-guaranteed*
Martin Luther King's Birthday	Mon, Jan 15	Non-guaranteed*
President's Day	Mon, Feb 19	Non-guaranteed*
Memorial Day (observed)	Mon, May 28	Non-guaranteed*
Memorial Day	Wed, May 30	Guaranteed**
Independence Day	Wed, Jul 4	Non-guaranteed*
Labor Day	Mon, Sep 3	Non-guaranteed*
Columbus Day (observed)	Mon, Oct 8	Non-guaranteed*
Columbus Day	Fri, Oct 12	Guaranteed**
Veterans Day	Sun, Nov 11	Non-guaranteed*
Veterans Day (observed)	Mon, Nov 12	Non-guaranteed*
Thanksgiving Day	Thurs, Nov 22	Non-guaranteed*
Christmas Day (1990)	Tues, Dec 25	Non-guaranteed*

\* Non-prime rates are in effect all day.

\*\*Prime rates are in effect from 10 AM - 5 PM ET.

The TOXNET computer status is always guaranteed. Non-prime rates will be in effect on all holidays marked with a single asterisk above.

DOCLINE will be available (non-guaranteed) on all U.S. Federal government holidays (observed) except Christmas Day, New Year's Day, Thanksgiving Day, Memorial Day, Independence Day, and Labor Day.

Notice of changes to this schedule and/or temporary changes in hours of operation will also appear as soon as any are identified in the online NEWS.

NLM TECHNICAL BULLETIN OCT 89

---

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service, National Institutes of Health  
National Library of Medicine (#38/4N-421)  
8600 Rockville Pike  
BETHESDA, MARYLAND 20894

Official Business  
Penalty for Private Use \$300

U.S. DEPARTMENT OF H.H.S.  
POSTAGE AND FEES PAID  
HHS-396

FIRST-CLASS MAIL  
POSTAGE & FEES  
PAID  
PHS/NIH/NLM  
BETHESDA, MD  
PERMIT No. G291

GRATEFUL MED Users  
Mac Search Tips - p. 15

# The NLM Technical Bulletin

ISSN 0146-3055

NOVEMBER 1989

No. 247

**In This Issue:**

**Remembering... The 25th Anniversary of the Medlars System** 1

**Some Comments on Comments** 7

**Report on NLM Seminar for GRATEFUL MED Trainers** 10

**Rebuilding of CATLINE, AVLINE, and NAF** 13

**Gold Standard Searches** 17

**Appendix A: Map of Online Codes**

**Regular Features:**

Databases	2
Technical Notes	3
GRATEFUL MED	15
Serials Update	22

## Remembering... The 25th Anniversary of the MEDLARS® System

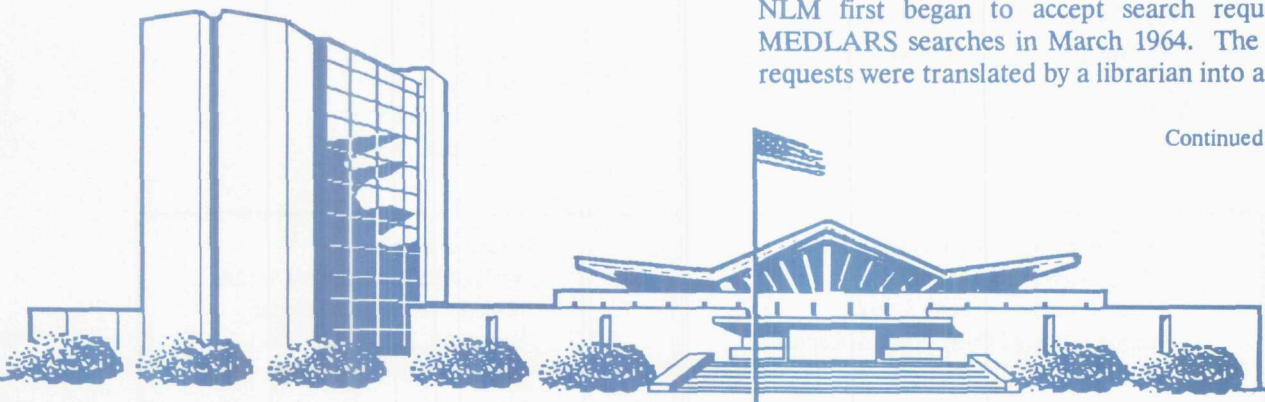
Carolyn B. Tilley  
Head, MEDLARS Management Section, NLM

This year, 1989, marks the 25th anniversary of the first generation of the information retrieval system called MEDLARS. As you may know, MEDLARS is an acronym for Medical Literature Analysis and Retrieval System.

In the 1950's, Frank Bradway Rogers, M.D., who was Director of NLM from 1949 until 1963, and Seymour Taine (who was then Editor of *Index Medicus*®), helped convert the manual production of the *Index* to a mechanized process using some of the first computerized data processing equipment. As they built this production and photocomposition system they hoped that the system could one day be used for searching and retrieving the references. With the introduction of the first generation of electronic computers, a contract with General Electric made the first MEDLARS information storage and retrieval system a reality.

NLM first began to accept search requests for MEDLARS searches in March 1964. The patrons' requests were translated by a librarian into a format

Continued on page 6



MEDLARS <sup>®</sup> DATABASE	TOTAL RECORDS	DATES COVERED	DATE LAST UPDATED	LATEST UPDATE TAG
ELHILL <sup>®</sup> COMPUTER				
AIDSDRUGS	57		16 OCT 89	
- AIDSLINE** <sup>™</sup>	24,520	JAN 80-DEC 89	06 NOV 89	8912(EM)
AIDSTRIALS	219		18 NOV 89	
- AVLINE <sup>®</sup>	19,893	THROUGH 1989	09 DEC 89	
- BIOETHICS <sup>®</sup>	28,402	JAN 73-OCT 89	07 OCT 89	8910(EM)
- CANCERLIT <sup>®</sup>	701,132	JAN 63-NOV 89	04 NOV 89	8911(EM)
- CATLINE <sup>®</sup>	655,166	THROUGH 1989	09 DEC 89	
CHEMLINE <sup>®</sup>	885,854		21 OCT 89	8910(EM)
CLINPROT <sup>®</sup>	7,582		18 NOV 89	8911(EM)
- DENTALPROJ	776		28 JUN 89	
? DIRLINE <sup>®</sup>	16,303		11 NOV 89	
DOCUSER <sup>®</sup>	11,699		02 DEC 89	
- HEALTH	480,502	JAN 75-JAN 90	09 DEC 89	9001(EM)
HISTLINE <sup>®</sup>	91,111		04 NOV 89	8911(EM)
- MEDLINE* <sup>®</sup>	567,342	JAN 88-JAN 90	09 DEC 89	9001(EM)
MED86	651,873	JAN 86-DEC 87	09 DEC 89	
MED83	890,600	JAN 83-DEC 85	09 DEC 89	
MED80	803,401	JAN 80-DEC 82	09 DEC 89	
MED77	775,781	JAN 77-DEC 79	09 DEC 89	
MED72	1,175,684	JAN 72-DEC 76	09 DEC 89	
MED66	1,310,563	JAN 66-DEC 71	09 DEC 89	
MESH VOC <sup>®</sup>	70,311	1990	09 DEC 89	
NAME AUTH <sup>®</sup>	339,588		09 DEC 89	
PDQ <sup>®</sup>		THRU NOV 89	01 NOV 89	
- POPLINE <sup>™</sup>	171,940	1970-NOV 89	04 NOV 89	8911(EM)
- SDILINE <sup>®</sup>	25,799	JAN 90	09 DEC 89	9001(EM)
- SERLINE <sup>®</sup>	73,531	1989	14 NOV 89	
- TOXLINE <sup>®</sup>	743,072	1981-1989	11 NOV 89	8911(EM)
- TOXLINE65	698,414	PRE 1965-1980	04 MAR 89	
TOXLIT <sup>™</sup>	780,149	1981-1989	11 NOV 89	8911(EM)
? TOXLIT65	586,405	1965-1980	01 SEP 87	

\*USUALLY UPDATED SEMI-MONTHLY EXCEPT FOR 9001 AND 9002 WHICH ARE MONTHLY.  
 \*\*N.B. FILE IS UPDATED THREE TIMES A MONTH; THIS IS PART 3 OF 3.

TOXNET COMPUTER

CCRIS	1,954		15 NOV 89
DBIR <sup>™</sup>	1,066		27 NOV 89
EMICBACK	67,975		02 JUN 89
ETICBACK	46,374		30 JAN 89
HSDB <sup>®</sup>	4,202		09 NOV 89
RTECS <sup>®</sup>	100,288		06 DEC 89
TRI	76,737		27 NOV 89

Head, MMS: Carolyn B. Tilley  
 Editor: Toby Port  
 Assistant Editor: Annette Morris  
 Technical Notes Editor: Joyce A. Conner  
 (301) 496-6193

Direct Inquiries to:  
 MEDLARS Management Section  
 National Library of Medicine  
 Bldg., 38A, Rm. 4N421  
 Bethesda, Maryland 20894

## Technical Notes

Whenever applicable, the heading of each Technical Note includes a reference to the section of the Online Services Reference Manual, 1989 that is considered most relevant to the item being discussed, e.g., (Manual 4.7.2). Users should keep in mind that the item may pertain to other sections as well.

### CHRISTMAS AND NEW YEAR'S HOLIDAY SCHEDULE

Here is the MEDLARS computer schedule for Christmas Day, **Monday**, December 25 and New Year's Day, **Monday**, January 1. Any details on guaranteed versus non-guaranteed hours of operation for the NLM ELHILL computer for these holidays will appear as online NEWS items the week before the holiday.

System	Rates/Status
ELHILL	non-prime/ non-guaranteed

TOXNET	non-prime/ guaranteed
--------	--------------------------

DOCLINE	not available
---------	---------------

#### Service Desks

MMS	not staffed
-----	-------------

DOCLINE	not staffed
---------	-------------

### MEDLINE & BACKFILES DATES OF COVERAGE

There will be no changes to the time periods covered by MEDLINE or its Backfiles when the 1990 system becomes available on December 11, 1989. MEDLINE will resume being a database consisting of 2-growing-to-3 years of references. Here are the primary dates of coverage:

File	Coverage	Aliases
MEDLINE	1988-1990	MED
MED86	1986-1987	M86, BACK86, B86
MED83	1983-1985	M83, BACK83, B83
MED80	1980-1982	M80, BACK80, B80
MED77	1977-1979	M77, BACK77, B77

MED72	1972-1976
MED66	1966-1971

M72, BACK72, B72
M66, BACK66, B66

### TREE NUMBER CHANGE - PNEUMOCYSTIS CARINII

The tree number for *Pneumocystis carinii* was changed in the 1990 MeSH vocabulary from B1.841.762.675 under Sporozoa to B5.354.750 under Fungi. Although its life cycle and morphological characteristics bear resemblance to both protozoa and fungi, phylogenetic analysis of its ribosomal RNA demonstrates that *Pneumocystis carinii* is a member of the fungi. [See Nature 1988 Aug 11; 334(6182):519-22.] We draw your attention to this change because *Pneumocystis Carinii* is a highly used search term with regard to the acquired immunodeficiency syndrome (AIDS). This change affects only those searchers who use the tree number in their online or stored searches and is of no consequence to those who enter the term itself in searches.

### OFFLINE PRINTS

Offline prints may now be requested from the DENTALPROJ, AIDSTRIALS, and AIDS DRUGS databases. Any standard print format may be used, i.e., SD, FU, DL or the searcher may customize his/her own print format by indicating specific data elements to print.

### NTIS TOLL-FREE 800 NUMBER FOR BILLING QUESTIONS

The National Technical Information Service (NTIS) distributes NLM publications and is NLM's billing agent. The NTIS office handling MEDLARS billing now has a toll-free telephone number: 1-800-423-9255. This number may be used by U.S. callers in all states including Virginia. In other countries, and the Washington, D.C. metropolitan area local calling area, use the Virginia NTIS billing information number: 703-487-4774.

The NTIS telephone number for ordering publications has not changed; it is 703-487-4650. An NTIS toll-free number, available for special rush or express delivery of publications, is 1-800-336-4700 (in Virginia, Canada,

Mexico, and other countries call 703-487-4700). There are additional fees to place a rush or express delivery order.

### MESH ERRATA

MeSH Section would like to point out a few errors in the Introduction to the Annotated Alphabetic List for 1990:

- p. I-17: under Bibliometrics replace L1.178.682.99.308+ with L1.178.682.99.325. This change also needs to be made on p. 100 of the Annotated MeSH and on p. 665 of the Trees.
- p. I-112: add CO /compl to the C4 LIST - Neoplasms and the C4.557.337 LIST - Leukemia
- p. I-116: replace AE /adv eff in the CHEMISTRY LIST with DE /drug eff
- p. I-118: add MT /methods to the N2 LIST - Health Facilities and Services
- p. I-132: add Bahrain to the NEW GEOGRAPHIC SUBHEADINGS
- p. I-148: add Bahrain to Appendix B - GEOGRAPHIC SUBHEADINGS FOR CATALOGERS
- p. I-156: in the example at the top of the page, replace MOUTH A#D TOOTH DISEASES (PX) with EQUIPMENT A#D SUPPLIES (PX)
- p. I-156: in the note stating, Pre-exploded terms are indicated with the symbol in the ..., add a ● (bullet) after the word symbol The bullet needs to be added on p. I-5 of the Trees also.
- p. I-157: replace MOUTH A#D TOOTH DISEASES with STOMATOGNATHIC DISEASES.

We apologize for any inconvenience that may have resulted from these oversights.

### MESH SEARCHING IN TOXLINE

Records in the TOXBIB and BIOSIS subfiles of TOXLINE now have Medical Subject Headings (MeSH). Beginning with the December 8912 (EM) TOXLINE update, records added to both the TOXBIB and the BIOSIS subfiles will contain 1990 MeSH. 1989 MeSH terms on records from earlier entry months will remain on TOXBIB and BIOSIS records until the entire TOXLINE file is rebuilt sometime in February 1990.

Therefore, it is currently necessary to search for both 1989 and 1990 MeSH terms in both the TOXBIB and BIOSIS subfiles for comprehensive online retrieval. Remember that all EXPLOSIONS after December 11 will use 1990 MeSH tree numbers. If you need to EXPLODE a 1989 Tree Number you must type the root number followed by a colon and qualify with (MN). Stored search strategies (including Automatic SDI's) that contain MeSH headings should be reviewed for 1990 MeSH vocabulary changes. Any changes to these strategies should be reviewed and restored by December 12, 1989. Watch the online NLM ELHILL news for the exact date of the re-built TOXLINE files.

### DOCLINE SERVICE DESK

Just a reminder: for assistance using DOCLINE or for questions about the DOCLINE system, call the DOCLINE Service Desk at 1-800-633-5666 (outside of Maryland) or 301-496-5511 (within Maryland). When staff are not available, callers may leave a recorded message and a staff member will return the call.

### ONLINE CODES IN THE UNITED STATES

Appendix A is map of online codes, showing the number of user codes by state for the United States and its territories.

### REMINDER: JANUARY 1990 SDILINE AUTOMATIC SDIs DELAYED DUE TO YEAR-END PROCESSING

The 9001 (EM) SDILINE Automatic SDIs for January 1990 will be run and mailed beginning December 1



rather than late November. However, please note that the 1990 MEDLINE, MEDLINE Backfiles, and SDILINE will not be made available online until Monday, December 11, 1989.

The 9002 (EM) SDILINE Automatic SDIs for February 1990 will be run over the weekend of December 30, 1989, and will be mailed during the following week.

**YEAR-END PROCESSING OF TITLE  
ABBREVIATIONS AND ISSN's**

Work continued on the Title Abbreviation (TA) field in MEDLINE, its Backfiles, and HEALTH. This year, a

program was created to match the SERLINE TA value against the MEDLINE, Backfiles, and HEALTH TA values. Any mismatches were identified and examined. If the TA value was wrong it was corrected in the appropriate file. A TA could be incorrect for several reasons such as an incorrect spelling or because the journal changed titles and the citations didn't reflect the change in the TA.

The ISSN field was also examined. Any record in MEDLINE, its Backfiles, and HEALTH that contained an ISSN beginning with the letter D, was deleted. The letter "D" was formerly used by NLM to indicate that a "dummy" ISSN had been created by NLM, because the real ISSN was not available when NLM began to index the journal.

MEDLARS Anniversary  
Continued from page 1

that the computer understood and that included Medical Subject Headings (MeSH). MEDLARS, as was true of most computer systems of that era, required sequential searching of all the tapes; this process took 40 minutes in 1964. As it was not practical to process one search at a time, a "batch" of search requests were keypunched on 80 column punch cards and entered together for one pass through the tapes. The first searches were performed by librarians for physicians and other health professionals who were instrumental in helping NLM to improve the MEDLARS system. The service was substantially limited at first because only a few people were sufficiently familiar with the system to operate it and process the searches.

As NLM staff gained experience and confidence with the system, Deputy Director (from 1960-1969) Scott Adams proposed the decentralization of MEDLARS. Decentralization began in mid-1964, when NLM awarded a contract to the University of California in Los Angeles to be a search center; this was followed by a contract with the University of Colorado in 1965. In 1966, NLM awarded contracts to the University of Alabama, the University of Michigan, and Harvard University. Other search centers later included Ohio State University and the Texas Medical Center. Further decentralization came with the creation of eleven Regional Medical Libraries under the aegis of the Medical Library Assistance Act (1965) between 1967 and 1970. Operators and search analysts came from all MEDLARS centers to NLM to learn how the system operated. Institutions in Europe showed interest and then NLM Director Martin Cummings, M.D., made possible the first MEDLARS centers abroad, in Great Britain and in Sweden.

The major disadvantage of the demand or batch search process was its slowness. The time from submitting a request through search strategy and computer processing to mailing of the printed, computer-produced bibliographies was 3 to 6 weeks. Of course, when the online MEDLINE (MEDLARS onLINE) retrieval service became available in October 1971, activity turned to it instead because references could be obtained in minutes. As the online search system grew, fewer requests were made of the batch MEDLARS system and NLM discontinued batch search services in 1973. In FY 1965, 1,623 "batch" MEDLARS searches were processed; currently, over 4 million searches are run each fiscal year against the online MEDLARS databases.

This reminder of the anniversary of MEDLARS was prepared from information found in Wyndham Miles' *A History of the National Library of Medicine*. <sup>1/</sup> For further reading on the history of NLM, *Index Medicus*, and MEDLARS, you are encouraged to read this excellent book.

---

<sup>1/</sup>  
Miles, Wyndham D. *A history of the National Library of Medicine: the nation's treasury of medical knowledge*. Bethesda, MD.: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Library of Medicine, 1982. 531p. Available from: the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-9322; S/N 017-052-00224-4, \$14.00 (\$17.50 foreign).

## Some Comments on Comments

Nancy E. Selinger  
Index Section, NLM

While there have already been several brief explanations of comments, this article is intended as an in-depth explanation of the new comments policy and the criteria for selection and handling.

**What constitutes a "comment"?** Not everything labeled by a journal as "Comment" or "Commentary" meets NLM's definition of a comment and, conversely, much that is not labelled as such does. In order for an item to be considered a comment it must be written primarily for the purpose of commenting upon an item which appeared within the same journal -- either drawing the reader's attention to the item as a whole, or to aspects of that item which the commenting author(s) find blame- or praiseworthy. Journals, on the other hand, frequently label as "commentary" articles which are stating an opinion or highlighting the state of the art in a certain area. The author(s) may cite previous works as references, but not comment in depth on any one.

**Types of material to be considered as comments:** The majority of commenting items are letters to the editor or editorials. Linkages for letters to the editor (in English) are being provided retrospectively after the commenting letters have been added to MEDLINE. Linkages are provided for approximately 500 letters a month which affects approximately 1,000 citations in MEDLINE and its Backfiles, because every comments linkage affects a minimum of two citations. Linkages for foreign language materials will also be provided retrospectively. Linkages added retrospectively for items with a publication date of 1989 or 1990 will not appear in the monthly issues of *Index Medicus*; they will appear in MEDLINE and in the *Cumulated Index Medicus*. Linkages for items in the Backfiles of MEDLINE will appear in the Backfiles, when the Backfiles are updated.

Editorials and "Lead Articles" are frequently written to highlight an article or articles within a journal issue. Linkages for these items are gradually being incorporated into the normal indexing workflow so that these linkages will appear not only in MEDLINE, but also in SDILINE, and in monthly issues of *Index Medicus*. However, once again, the editorial or lead article must be commenting upon (i.e., discussing) particular aspects of an item within the issue, not merely referring to (i.e., mentioning) it.

**Scope of material to be considered as comments:** Comment linkages will only be provided for commenting items with a publication date of 1989 or later, and only for items commenting upon a previous item within the same journal title. While there is no limit by publication date for the item being commented upon, the item must have been indexed in order for a linkage to be made. For example, a letter published in June 1989 that comments upon an article which appeared in the same journal back in January of 1987 would be eligible for linkage as a comment as long as the original item was in MED86. The comments policy will not affect the criteria used to select items for inclusion in *Index Medicus* and MEDLINE.

**Components of the comments linkage:** The comments linkage affects a minimum of two citations (since an item could comment upon more than one item). A bibliographic link is provided from the commenting item to the item commented upon and from the item commented upon to the commenting item by means of the rubrics [comment] and [see comments] added to the end of titles. Bibliographic information in the Comments (CM) field provides the reference to the commenting item (Comment on) or item commented upon (Comment in). See the example of a comment linkage on the next page.

**Handling of the commenting item:** The rubric [comment] is added to the end of a title for the commenting item. If that item happens to be an editorial or a letter to the editor, the rubric [letter] or [editorial] will be modified to read [letter; comment] or [editorial; comment]. Because the letter or editorial was written primarily to comment upon something else, it is equally a letter/editorial and a comment. The Comments (CM) field contains the bibliographic reference to the item commented upon.

**Handling of the item commented Upon:** The rubric [see comments] is added to the end of the title for the item being commented upon. If that item happens to be a letter or editorial, the rubrics would appear as follows: [letter] [see comments] or [editorial] [see comments]. In these instances, the item is first and foremost either a letter or editorial. When another author comments on it, we are then referring the user to subsequent comments. This use of double brackets is consistent with treatment of letters or editorials for which subsequent erratum or retraction notices are published. The Comments (CM) field contains the bibliographic reference to the commenting item.

Example of a Comment Linkage

**Commenting Item**

UI - 89281636  
 AU - Larsen PR  
 TI - Maternal thyroxine and congenital hypothyroidism [editorial;  
 comment]  
 CM - Comment on: N Engl J Med 1989 Jul 6;321(1):13-6  
 SO - N Engl J Med 1989 Jul 6;321(1):44-6

**Item Commented Upon**

UI - 89281631  
 AU - Vuksma T  
 AU - Gons MH  
 AU - de Vijlder JJ  
 TI - Maternal-fetal transfer of thyroxine in congenital hypothyroidism  
 due to a total organification defect or thyroid agenesis [see  
 comments]  
 CM - Comment in: N Engl J Med 1989 Jul 6;321(1):44-6  
 SO - N Engl J Med 1989 Jul 6;321(1):13-6

**Currency of material being linked:** NLM started identifying and setting aside items as comments as soon as material with a publication date of 1989 was received. Beginning in March 1989, several linkages were added to citations in MEDLINE and MED86. However, it wasn't until August 1989, when the contract for addition of commentary linkages to MEDLINE and its Backfiles was awarded, that linkages were done in any great number. Therefore, there are a number of items which are backlogged. The most current material receives priority handling.

**Handling of discussion following an article:** Some articles contain sections immediately following the end of the original article labelled as "Discussion" or "Comment" written by someone other than the author(s). In the past, NLM has included these discussions in the pagination of the original article. However, this policy caused problems for users when trying to reconcile differences in bibliographic references because other databases weren't including subsequent discussions in their pagination for articles. Therefore, while NLM will still include pagination for the discussion following the article, we will specify which portion of the pagination relates to the subsequent discussion. In the example on the next page, pagination for the article is from page 101-10; pagination of the discussion runs from page 111-20.

## Example of Pagination

```
UI - 89374925
AU - Katz S
AU - Kravetz S
TI - Facial plastic surgery for persons with Down syndrome: research
    findings and their professional and social implications.
SO - Am J Ment Retard 1989 Sep;94(2):101-10; discussion 111-20
```

**Differentiating between comments and discussion:** Sometimes it is not easy to determine whether material following an article should be treated as a separate indexable entity and linked to the previous article as a comment, or included as discussion in the pagination of the previous article. NLM is now following these general "guidelines" when deciding how to handle such cases. While we recognize these distinctions are somewhat arbitrary, they are necessary in trying to establish and maintain some consistency in handling:

An item will be treated as discussion (i.e., designated as discussion in the pagination field of the original article) if it:

- 1) does not have a citable title or its title is a repetition of the previous article's title.
- 2) is indented or bracketed in the Table of Contents.

There are instances where an article is commenting upon a previous article and then the authors from the article being commented upon respond. The response

will be treated as discussion within the pagination field of the commenting article.

While all this may appear confusing, the attempt to differentiate between comment and discussion is a logical extension of the way letters are handled within MEDLINE. A letter to which there is a reply in the Letters to the Editor section only appears in MEDLINE under the name(s) of the letter writer(s) with no indication that there is a reply by someone else. The content of the reply, however, is taken into consideration when assigning MeSH terms to the letter and is included in the pagination for the letter.

**Conclusion:** The policy regarding handling of comments has been evolving in 1989. The decisions to provide these linkages and to break out pagination of discussion from the pagination for the article itself are not meant to change the way we have been indexing material, but rather to assist the user in locating additional comments which may be pertinent and in more clearly identifying those portions of the journal which may be relevant to users when filling out inter-library loan requests or requests for photocopies of an item.

## Report on NLM Seminar for GRATEFUL MED Trainers

Carolyn B. Tilley  
Head, MEDLARS Management Section, NLM

Over 120 medical librarians, health professionals, and others attended the Seminar for GRATEFUL MED Trainers held on November 9 at NLM. Valuable information was presented, digested, and considered, and issues were raised and discussed. Here is a brief report on this exciting day.

A dinner was held the evening before the Seminar at the Omni Shoreham Hotel in Washington, D.C.; our excellent guest speaker was Joyce Mitchell, Ph.D., Director of Information Systems and Professor of Medical Genetics at the University of Missouri-Columbia. Her presentation told of efforts to introduce online searching using GRATEFUL MED into the curriculum for third and fourth year medical students. Included in Dr. Mitchell's data was an analysis of the students' searching behavior and the difficulties they encountered while using GRATEFUL MED to search on genetics topics. If you missed her talk, you can still read about the program in Dr. Mitchell's article in the *American Journal of Human Genetics*. <sup>1/</sup> We appreciated Dr. Mitchell's humor and expertise in relating her experiences.

The following morning, Lois Ann Colaianni, Associate Director for Library Operations at NLM, set the stage for the day's proceedings with her Welcome and Opening Remarks. She directed everyone's attention to NLM's Outreach efforts and encouraged participants to introduce health professionals and others to online searching using GRATEFUL MED. She assured attendees that their feedback with regard to GRATEFUL MED and training was sought by NLM and encouraged all attending to communicate with NLM about the problems and the success they encounter when providing GRATEFUL MED training.

Ann McKibbon and Cindy Walker Dilks of McMaster University in Hamilton, Ontario, Canada, who have published reports of their efforts with GRATEFUL MED, along with R. Brian Haynes, M.D., Ph.D. <sup>2/</sup>, presented information about introducing the new user to GRATEFUL MED in the medical school environment. Data and slides supplemented descriptions of their

program which includes working with students in small group sessions, using a 20-page workbook, and practice searches on questions brought in by the students.

Ellen Wilson Green from Cedars-Sinai Medical Center in Los Angeles followed with a report of training users on searching via GRATEFUL MED in a hospital environment. <sup>3/</sup> Here are a few "nuggets" from her fine talk:

- o plan and develop good publicity announcements
- o start simply
- o tie examples and materials presented to the specific audience
- o be familiar with GRATEFUL MED and make yourself available for consulting and troubleshooting after class
- o remember staffing resources needed for the training program
- o good teachers don't necessarily come out of education programs; most important are:
  - o be willing
  - o be committed

She also distributed copies of the booklet used with GRATEFUL MED at Cedars--"GRATEFUL MED: GATEWAY TO MEDLARS."

Eve Ruff of the University of Washington Regional Medical Library in Seattle next told about how she trains unaffiliated practitioners at remote sites. Her excellent talk concentrated on the "nuts and bolts" of GRATEFUL MED training as provided through the Transportable Electronic Library Enhancement (TELE) Project, punctuated with slides of breathtaking scenery of the Pacific Northwest. The TELEproject, which is an outreach project supported by NLM, features Eve as the Project Coordinator and provides for on-site training in the use of GRATEFUL MED, provision of information resources, follow-up consultation, and troubleshooting support.

Michael Zaroukian, M.D., Assistant Professor, Division of General Medicine at Michigan State University in East Lansing, Michigan was the final speaker for the morning session. Dr. Zaroukian reported on teaching retrieval skills using GRATEFUL MED at workshops held at professional meetings. Dr. Zaroukian has submitted an article concerning GRATEFUL MED for publication to *Academic Medicine*. <sup>4/</sup>

The speakers answered questions as a panel and offered their observations based on teaching experiences.

During breaks and lunch, attendees visited poster sessions brought by the following individuals:

Dr. Joyce Mitchell - University of Missouri-Columbia. Poster: Teaching genetics in biochemistry by computer literature searching.

Ms. Jenny Harriman - NIH Library. Poster: Tutorials for NIH scientists, Howard Hughes Medical Institute scholars.

Ms. Sue Brizuela - Philadelphia College of Pharmacy and Science. Poster: Small group GM training for the pharmacy sciences.

Ms. Mari Stoddard - Vanderbilt University, Medical Center Library. Poster: Humor in teaching MEDLINE.

In the afternoon, John Anderson, Director of Information Systems for NLM, spoke on NLM's interest in working directly with institutions that have sizeable groups of users who wish to use GRATEFUL MED with Local Area Networks (LANs). In this way, NLM can gain valuable experience while supporting those who are involved with new digital phone systems and LANs.

Janet Zipser, assisted by Annette Morris both of MEDLARS Management Section (MMS), presented a talk and demonstration on troubleshooting GRATEFUL MED problems. They used a draft copy of a troubleshooting guide which will be distributed with Version 5.0 (IBM).

Rose Marie Woodsmall from NLM's Office of Planning and Evaluation demonstrated a preview of Version 5.0 of GRATEFUL MED for IBM computers. She reviewed all the new features including the availability of an expanded MeSH in this latest version.

Bill Trefzger of MMS demonstrated the new Macintosh version of GRATEFUL MED now available from NTIS.

NLM is gratified at the interest in this Seminar where a forum to help support those interested in training users to conduct their own online searches using GRATEFUL MED was provided. NLM does not feel that there is any one "best way" of training users to conduct online searching using GRATEFUL MED. Rather, NLM would prefer that librarians and information specialists customize programs and materials for their own audiences and situations. Many individuals providing training have already developed excellent workbooks. If you have developed such training aids and are interested

in sharing them, please let us know and we will include a notice on their availability in the *Technical Bulletin*.

The GRATEFUL MED HowTo PC tutorial disk is an excellent way to get users started with GRATEFUL MED. This disk was mailed free to all who purchased Version 4.0 of GRATEFUL MED. Those who had purchased earlier versions of the software were encouraged to obtain a free copy by contacting NTIS in the March 1989 *Technical Bulletin*. If you ordered a GRATEFUL MED version before 4.0 and want a copy of HowTo, send a mailing label along with a request for a copy of HowTo, referencing its Product Number: PB89-167779, to:

U.S. Department of Commerce  
National Technical Information Service  
5285 Port Royal Road  
Springfield, VA 22161

NLM will offer a shorter version of the Seminar in the form of a 4-hour offering on Sunday morning, May 20, 1990, at the annual meeting of the Medical Library Association in Detroit. Look for future announcements from MLA and plan on attending.

#### Bibliography

1/ Proud VK; Schmidt FJ; Johnson ED; Mitchell JA. Teaching human genetics in biochemistry by computer literature searching. *Am J Hum Genet* 1988 Sept;43(3):A66

Proud VK; Schmidt FJ; Johnson ED; Mitchell JA. Teaching human genetics in biochemistry by computer literature searching. *Am J Hum Genet* 1989 Apr;44(4):597-604

Mitchell JA; Proud VK; Johnson ED. Teaching medical students to search MEDLINE for genetics information. In Hammond WE, ed. *AAMSI Congress 1989*. Washington, DC: American Association for Medical Systems and Informatics, 1989, 1989:84-88

2/Haynes RB; McKibbin KA; Walker CJ; Ryan NC; Fitzgerald D; Ramsden MF. A study of the use and usefulness of online access to MEDLINE in clinical settings. *Ann Intern Med* [in press]

Walker CJ; McKibbin KA; Ryan NC; Ramsden MF, Fitzgerald D; Haynes RB. Methods for assessing the competence of physicians' use of MEDLINE with GRATEFUL MED. *Proceedings of the 13th Symposium of Computer Applications in Medical Care*,

Washington, DC. Los Angeles, CA: IEEE Computer Society Press:1989:441-4

Kirpalani H; Schmidt B; McKibbon KA; Haynes RB; Sinclair JC. Searching MEDLINE for randomized clinical trials involving care of the newborn. *Pediatrics* 1989 Apr;83(4):543-6

Haynes RB; Ramsden M; McKibbon KA; Walker CJ; Ryan NC. A review of medical education and medical informatics. *Acad Med* 1989 Apr;64(4):207-12

Walker CJ; McKibbon KA. GRATEFUL MED: Searching simplified for the clinician and librarian. *Bibliotheca Medica Canadiana* 1988;9:210-3

McKibbon KA; Walker CJ; Ryan NC; Fitzgerald D; Haynes RB. A study of MEDLINE in clinical settings: Design and preliminary results. *Proceedings of the 12th Symposium of Computer Applications in Medical Care, Washington, DC. Los Angeles, CA: IEEE Computer Society, 1988:526-9*

Haynes RB; McKibbon KA. GRATEFUL MED. *MD Computing* 1987;4:47-9,57

McKibbon KA; Haynes RB; Baker LM; Flemming T; Walker CJ. Teaching clinicians to search MEDLINE:

Description and evaluation of a short course. *Proceedings of the 25th Conference in Research in Medical Education. Washington, DC: American Association of Medical Colleges, 1986:231-6*

Haynes RB; McKibbon KA; Fitzgerald D; Guyatt GH; Walker CJ; Sackett DL. How to keep up with the medical literature. IV. Using the literature to solve clinical problems. *Ann Intern Med* 1986;105:636-40

Haynes RB; McKibbon KA; Fitzgerald D; Guyatt GH; Walker CJ; Sackett DL. How to keep up with the medical literature. V. Access by personal computer to the medical literature. *Ann Intern Med* 1986;105:810-24

Haynes RB; McKibbon KA; Walker CJ; et al. Computer searching of the medical literature: An evaluation of MEDLINE searching systems. *Ann Intern Med* 1985;103(5):812-816

3/ Soben P; Green EW. GRATEFUL MED Searching: A Hospital Library Perspective. *Med Ref Serv Quart* 1988;7(3):35-43

4/ Zaroukian MH; Haf JJ; Alfano MA. MEDLINE computerized literature searching using GRATEFUL MED: a pilot instructional project for entering medical students. *Acad Med* [submitted 1989]



# Rebuilding of CATLINE, AVLINE, and NAF

Sally Sinn  
 Technical Services Division, NLM

The rebuilding of CATLINE, AVLINE, and the Name Authority File (NAF) was completed and the files were made available online on December 11, 1989. The rebuilding involved data changes, new values, and new features. The changes that affect searching and displaying records are described below. Those changes that pertain to CATLINE are denoted by [C]; those to AVLINE by [A]; those to NAF by [N].

## 1. 1990 MeSH Heading (MH)--[C],[A]

All records that required 1990 MeSH heading replacements in the MeSH Heading (MH) field were changed. In addition, 1990 MeSH includes additions and changes to the lists of form and geographic subheadings used by catalogers.

### New Geographic Subheadings

Bahrain	Swaziland
Djibouti	Vanatu
Northern Territory	Yukon Territory
Northwest Territories	

### New Form Subheadings

examination questions - videocassettes  
 periodicals - indexes  
 popular works - slides  
 programmed instruction - audiocassettes

### Changed Form Subheadings

From:	To:
audiovisual kits	multimedia kits
nurses' instruction - audiovisual kits	nurses' instruction - multimedia kits
periodicals - audiovisual kits	periodicals - multimedia kits
phrases - audiovisual kits	phrases - multimedia kits

## 2. Title Word Searching (TF)--[C],[A]

Because there are a number of fields in CATLINE and AVLINE from which significant words are extracted and indexed as Text Words (TW), it has been difficult to search for Text Words appearing only in the titles of books or journals. Now, searchers can limit a Text Word search to the Title and Title Continuation fields by using the Title Field Text Words (TF) qualifier. Text Words from all occurrences of the Title (TI) field and the Title Continuation (TC) field are indexed both as Text Words (TW) and as the new TF.

The example below shows how title word searching can effectively narrow a search:

SS 1 /C?  
 (TW) surgical and staff

PROG:  
 SS (1) PSTG (87)

SS 2 /C?  
 (TW) surgical and staff

PROG:  
 SS (2) PSTG (14)

## 3. Code for Index in MARC Indicators (MA)--[C], [A]

The code 'C' has been added to the MARC Indicator (MA) field to identify monographs containing an index or indexes. This information was formerly conveyed in the Bibliography Note (BI) as text; e.g., 'Includes bibliography and index'. The codes in the MA field are all directly searchable and display with a decode value only in the PRINT DETAILED format.

### MARC Indicator Codes

Searchable Code	Value Displayed
A	GOVERNMENT PUBLICATION
B	FESTSCHRIFT
E	FICTION
F	TRANSLATED TEXT
C	INDEX
P	PERIODICAL

**4. Additions to Country of Publication (CY)--[C]**

The CATLINE records for items classified in WZ 270 - Americana, have been modified to add 'United States' as the Country of Publication (CY) in all cases where there was no existing CY field. The CY field was also added to many pre-19th century CATLINE records by scanning the Imprint field and assigning the appropriate country name based on the city used for the place of publication.

**5. Display of Shelving Location (SL)--[A]**

The Shelving Location (SL) field, denoting shelving

locations in the NLM collection, has been added to the list of elements that display with the standard PRINT command in AVLINE.

**6. Deletion of Language (LA)--[N].**

The Language (LA) field previously used for MARC three-letter codes for the languages of name and series headings has been deleted from the NAF. A tag for the language code was originally described in the USMARC Authorities Format, but using a language value for authority headings has never been implemented in the MARC formats or by the Library of Congress.



**VERSION 4.0**

[Editor's Note: Each month the Technical Bulletin features a column of questions answers concerning GRATEFUL MED on both the IBM and Macintosh versions. Contributions for this column will be appreciated.]

*Q. You've mentioned in previous columns that the next IBM version will require a minimum of 384K RAM. My computer has only 256K. What should I do?*

A. We recommend that you upgrade your memory (to 512K if possible). This can be done easily by installing a memory board in your computer. Where do you get a memory board? You can get it from any computer supply dealer. If you're not hardware savvy, it's advisable to use a reputable dealer who will install the board in your computer for you and who can help you in the future should you have any problems or questions. The good news: Random Access Memory is becoming less and less expensive, and with more memory you'll find you can use many more software applications.

*Q. I'm using the Macintosh version and I would like to search several MeSH terms on one Subject line but I can't select more than one MeSH entry from the MeSH display.*

A. To search with more than one MeSH term on a Subject line, use this procedure:

After you have selected the first MeSH term, you are taken back to the Search window and the cursor will still be on the Subject Word line with the selected term.

Click again on the **Find MeSH Entry** button, type your second term in the **MeSH Search**

**String** box (over the term that is there) and click on OK.

Select the additional term from the MeSH display window. The term will automatically be transferred back to the Search window, on the same line as your first term. The two terms will be separated by the word, "or."

You can keep doing this, collecting up to 10 terms for one Subject line.

*Q. When using the Macintosh version is there a way to skip the opening screen?*

A. Yes, hold the **command** key down while double clicking on the GRATEFUL MED icon. Other shortcuts: to open an existing search file or results file directly (without seeing the opening screen), hold the command key down while double clicking on the "SEARCH" document icon or the "RESULT" document icon you want to open.

*Q. I did not receive the update registration card for the mailing of the IBM version 5.0. The last GRATEFUL MED column indicated it would be sent to anyone who purchased a previous version. What should I do?*

A. First, check with your colleagues, cohorts, and cronies to see if anyone else received the registration card (see Figure 1) on your behalf. We believe that in the past some users encountered problems receiving their software updates, because the order was placed by an accounting or purchasing office. These offices did not keep records on who originally ordered the software and returned the updates. If you are unable to locate the registration card, call our Service Desk (1-800-638-8480 or 301-496-6193) between 8:30 am and 5:00 pm ET and we will register you over the phone. It is important that we speak with you directly in order to collect some information, so please do not leave registration information on our answering machine.

Version 5.0 will probably be mailed in early February 1990.

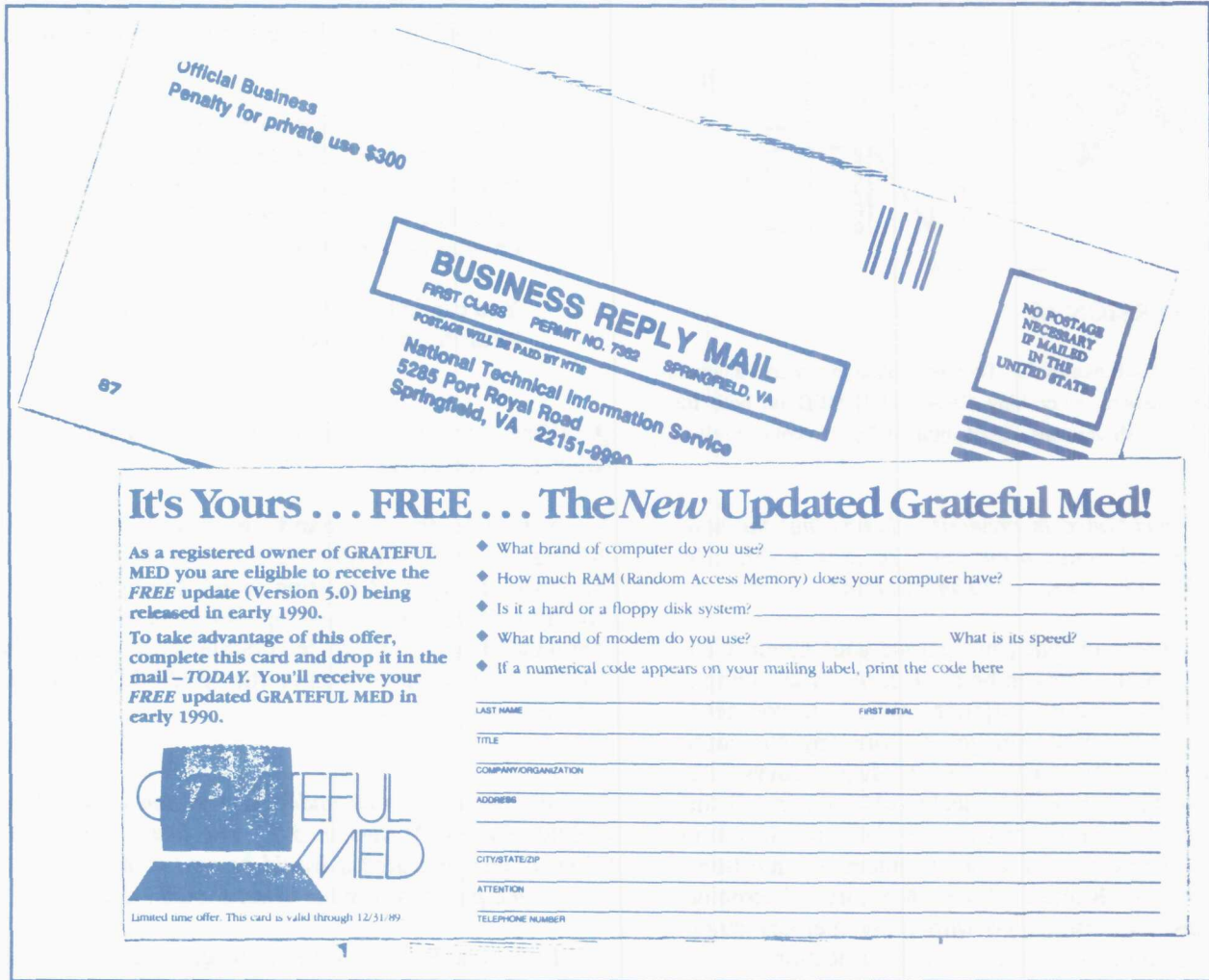


Figure 1 - Update Registration Card

## Gold Standard Searches

Joyce A. Conner  
Toby G. Port  
Medlars Management Section, NLM

We wish to thank all those who mailed us their search strategies in response to the "Gold Standard Searches" article in the July issue of the *Technical Bulletin*. This article offered searchers a chance to match wits with the NLM "experts" on a search strategy. Please note that the NLM search strategies were developed at the Library with no interaction between the requester and the searcher. At periodic intervals we will be printing the same requests submitted to our searchers here so you can try them out in your facility. The first search request published in the July issue was:

Causes, treatment, signs and symptoms of depression specifically in the post partum period (i.e., first year after childbirth or traceable to the event of childbirth). To include symptoms from mild depression (also known as "baby blues") to post partum psychosis.

Congratulations to Hazel B. Benson, Pharmacy Library, Ohio State University, Columbus, OH and Daphne Plaut, Medical Library, Bess Kaiser Medical Center, Portland, OR and Jonathan Lord, Medical Library, Hartford Hospital, Hartford, CT. Winning entries receive either a free copy of GRATEFUL MED or one hour of free search time. The winning strategies, printed in Figures 1, 2, and 3, were selected based on the number of relevant citations retrieved and the search terms used. The "Gold Standard" strategy developed by the NLM expert is printed in Figure 4. The NLM strategy used MeSH Headings only; however, Text Words (words from the title or abstract) could have been used in your strategies.

Honorable mention goes to the following searchers: Jeannine Cyr Gluck, Medical Librarian, Manchester Memorial Hospital, Manchester, CT; and Marcia Anderson, Medical University of South Carolina, Library, Charleston, SC.

The search topic was on the postpartum period. MeSH headings of PUERPERIUM and PUERPERAL DISORDERS are available for this concept. Ms. Plaut combined these two MeSH headings with various

Text Words (words from the title or abstract). Ms. Benson used only PUERPERAL DISORDERS; however, this did not affect her retrieval adversely. Mr. Lord used both MeSH headings.

The concept of depression was retrieved in each strategy. Remember, the search topic includes depression from mild depression to post partum psychosis. The NLM "Gold Standard" search used PSYCHOTIC DISORDERS (MH) but did not explode the term. However, AFFECTIVE DISORDERS, PSYCHOTIC, a term indented under PSYCHOTIC DISORDERS, was exploded. Two contest winners exploded PSYCHOTIC DISORDERS, which includes ORGANIC MENTAL DISORDERS, PSYCHOTIC and other terms. One winning entrant entered the MeSH heading without exploding. Ms. Bensen and Ms. Plaut also chose to use other terms from within the F3 tree (Behavioral and Mental Disorders) such as:

ANXIETY DISORDERS,  
ADJUSTMENT DISORDERS, or  
ORGANIC MENTAL DISORDERS.

Another important heading DEPRESSION (MH) was used in all submitted strategies.

Finally, as requested in the "Gold Standard Searches" article, retrieval was limited to English-language citations with abstracts published in 1988.

Many searchers used subheadings to limit the search to the aspects of "causes, treatment, signs and symptoms". In this case, restricting with subheadings resulted in the elimination of relevant retrieval. This is because there were so many applicable subheadings in the search request; if a subject has many possible subheadings, then it is really a broad search, best left without subheading qualifiers. When a more specific or focused search request is received, that is the time to use subheadings to assure proper relationships. Also, the size of preliminary retrieval should help determine the use of subheadings. The single most common mistake was the use of SUBS APPLY to apply subheadings before knowing what retrieval would actually be.

None of the winning strategies is the absolutely correct strategy or the exact answer. These are published to show what other searchers are doing with a topic. Our thanks again to everyone who submitted an entry. Watch for the next "Gold Standard" search topic in a future *Technical Bulletin* issue.

SS 1 /C?

USER:

puerperal disorders

PROG:

SS (1) PSTG (324)

SS 2 /C?

USER:

depression or exp psychotic disorders or exp anxiety disorders

PROG:

SS (2) PSTG (9687)

SS 3 /C?

USER:

1 and 2

PROG:

SS (3) PSTG (67)

SS 4 /C?

USER:

3 and not for (1a)

PROG:

SS (4) PSTG (64)

SS 5 /C?

USER:

4 and author (aa)

PROG:

SS (5) PSTG (44)

SS 6 /C?

USER:

5 and 88 (yr)

PROG:

SS (6) PSTG (31)

Figure 1 - Hazel Benson

SS 1 /C?

USER:

exp anxiety disorders or depression or exp psychotic disorders or

PROG:

CNT 1

USER:

adjustment disorders or exp organic mental disorders

PROG:

SS (1) PSTG (11108)

SS 2 /C?

USER:

exp puerperium or exp puerperal disorders or

PROG:

CNT 2

USER:

postpartum (tw) or post (tw) and partum (tw) or postnatal (tw)

PROG:

SS (2) PSTG (4493)

SS 3 /C?

USER:

1 and 2

PROG:

SS (3) PSTG (89)

.  
.  
(Search was limited to English language citations with  
abstracts published in 1988.)

PROG:

SS (6) PSTG (36)

Figure 2 - Daphne Plaut

SS 1 /C?  
 USER:  
 depressive disorder  
 PROG:  
 SS (1) PSTG (2660)

SS 2 /C?  
 USER:  
 depression  
 PROG:  
 SS (2) PSTG (802)

SS 3 /C?  
 USER:  
 puerperal disorders and psychotic disorders  
 PROG:  
 SS (3) PSTG (30)

SS 4 /C?  
 USER:  
 puerperium or puerperal disorders  
 PROG:  
 SS (4) PSTG (775)

SS 5 /C?  
 USER:  
 1 or 2  
 PROG:  
 SS (5) PSTG (3414)

SS 6 /C?  
 USER:  
 4 and 5  
 PROG:  
 SS (6) PSTG (37)

SS 7 /C?  
 USER:  
 3 or 6  
 PROG:  
 SS (7) PSTG (61)

.

(Search was limited to English language citations with  
 abstracts published in 1988.)

.

PROG:  
 SS (10) PSTG (28)

Figure 3 - Jonathan Lord



SS 1 /C?

USER:

puerperium or puerperal disorders

PROG:

SS (1) PSTG (801)

SS 2 /C?

USER:

depression or exp affective disorders, psychotic or

PROG:

CNT 2

USER:

psychotic disorders

PROG:

SS (2) PSTG (4630)

SS 3 /C?

USER:

1 and 2

PROG:

SS (3) PSTG (68)

SS 4 /C?

USER:

3 and not for (1a)

PROG:

SS (4) PSTG (62)

SS 5 /C?

USER:

4 and author (aa)

PROG:

SS (5) PSTG (45)

SS 6 /C?

USER:

5 and 88 (yr)

PROG:

SS (6) PSTG (29)

Figure 4 - Gold Standard Search

# Serials Update

## INDEXED TITLES UPDATE, NOVEMBER 1989

The following titles cited in MEDLINE, HEALTH, and POPLINE have recently been selected for indexing, undergone a title change, or ceased publication. This list is not cumulative; the information provided is only for titles whose status has changed since the

last UPDATE. More detailed information may be found in SERLINE. For further information, please contact MMS or Ms. Esther Baldinger, (301) 496-1276, Technical Services Division, NLM.

## TITLES SELECTED FOR INDEXING, OCTOBER 1989

- |   |  |
|---|--|
| <p><b>IM</b> ACTA CRYSTALLOGRAPHICA. SECTION A:<br/>FOUNDATIONS OF CRYSTALLOGRAPHY<br/>ACTA CRYSTALLOGR A<br/>39PT1, JAN 1983--<br/>MUNKSGAARD<br/>COPENHAGEN DENMARK<br/>CONTINUES: ACTA CRYSTALLOGRAPHICA. SECTION<br/>A, CRYSTAL PHYSICS, DIFFRACTION,<br/>THEORETICAL AND GENERAL CRYSTALLOGRAPHY.<br/>INDEXING BEGAN WITH V44N1, 1988.<br/>W1 AC7838AB 0108-7673<br/>A05110000 JC: AI7</p>                   | <p><b>IM</b> CURRENT CLINICAL TOPICS IN INFECTIOUS<br/>DISEASES<br/>CURR CLIN TOP INFECT DIS<br/>1, 1980--<br/>MCGRAW-HILL UNITED STATES<br/>NEW YORK<br/>INDEXING BEGAN WITH V8, 1987.<br/>W1 CU786T 0195-3842<br/>C55130000 JC: AHO</p>  |
| <p><b>IM</b> ACTA CRYSTALLOGRAPHICA. SECTION B,<br/>STRUCTURAL SCIENCE<br/>ACTA CRYSTALLOGR B<br/>39PT1, FEB 1983--<br/>MUNKSGAARD FOR THE INTERNATIONAL UNION OF<br/>CRYSTALLOGRAPHY<br/>COPENHAGEN DENMARK<br/>CONTINUES: ACTA CRYSTALLOGRAPHICA. SECTION<br/>B, STRUCTURAL CRYSTALLOGRAPHY AND CRYSTAL<br/>CHEMISTRY.<br/>INDEXING BEGAN WITH V44N1, 1988.<br/>W1 AC7838BA 0108-7681<br/>A05116000 JC: AI6</p> | <p><b>IM</b> CURRENT OPINION IN IMMUNOLOGY<br/>CURR OPIN IMMUNOL<br/>IN1, SEP/OCT 1988/89--<br/>CURRENT SCIENCE UNITED STATES<br/>PHILADELPHIA<br/>INDEXING BEGAN WITH VIN1, 1988-89.<br/>W1 CU799GDL 0952-7915<br/>SR0062624 JC: AH1<br/>CURRENT SCIENCE, 1201 LOCUST ST, 2ND<br/>FLOOR, PHILADELPHIA, PA 19107.</p>        |
| <p><b>IM</b> ACTA CRYSTALLOGRAPHICA. SECTION C.<br/>CRYSTAL STRUCTURE COMMUNICATIONS<br/>ACTA CRYSTALLOGR C<br/>39PT1, JAN 1983--<br/>MUNKSGAARD<br/>COPENHAGEN DENMARK<br/>CONTINUES: CRYSTAL STRUCTURE COMMUNICATIONS.<br/>INDEXING BEGAN WITH V44N1, 1988.<br/>W1 AC7838C 0108-2701<br/>A05120000 JC: AI5</p>  | <p><b>IM</b> JOURNAL OF BIOMOLECULAR STRUCTURE AND<br/>DYNAMICS<br/>J BIOMOL STRUCT DYN<br/>IN1, OCT 1983--<br/>ADENINE PRESS UNITED STATES<br/>GUILDERLAND NY<br/>INDEXING BEGAN WITH VIN1, 1983.<br/>W1 J0564W 0739-1102<br/>J14645000 JC: AH2</p>   |
| <p><b>IM</b> BIOMEDICAL AND ENVIRONMENTAL SCIENCES<br/>BIOMED ENVIRON SCI<br/>IN1, JUN 1988--<br/>ACADEMIC PRESS<br/>SAN DIEGO CA UNITED STATES<br/>INDEXING BEGAN WITH VIN1, JUNE 1988.<br/>W1 BI853TV 0895-3988<br/>SR0061742 JC: AHX</p>   | <p><b>IM</b> JOURNAL OF CHEMICAL NEUROANATOMY<br/>J CHEM NEUROANAT<br/>IN1, JAN/FEB 1988--<br/>JOHN WILEY<br/>CHICHESTER ENGLAND<br/>INDEXING BEGAN WITH VIN1, JAN-FEB 1988.<br/>W1 J0581G 0891-0618<br/>SR0062143 JC: AH3<br/>JOHN WILEY AND SONS LTD., BAFFINS<br/>LANE, CHICHESTER, WEST SUSSEX PO19<br/>1UD, ENGLAND</p> |
| <p><b>IM</b> BRITISH JOURNAL OF NEUROSURGERY<br/>BR J NEUROSURG<br/>IN1, 1987--<br/>CARFAX<br/>ABINGDON ENGLAND<br/>INDEXING BEGAN WITH VIN1, 1987.<br/>W1 BR582 0268-8697<br/>SR0057240 JC: AHZ</p>  | <p><b>IM</b> JOURNAL OF KOREAN MEDICAL SCIENCE<br/>J KOREAN MED SCI<br/>IN1, SEP 1986--<br/>KOREAN ACADEMY OF MEDICAL SCIENCE<br/>SEOUL KOREA<br/>INDEXING BEGAN WITH VIN1, SEP 1986.<br/>W1 J0733I<br/>SR0058704 JC: AH4<br/>KOREAN ACADEMY OF MEDICAL SCIENCE, C.P.O.<br/>BOX 2062, SEOUL, KOREA</p>                       |

INI JOURNAL OF TRANSCULTURAL NURSING  
 J TRANSCULT NURS  
 IN1,SUMMER 1989--  
 PUBLISHED BY THE UNIVERSITY OF TENNESSEE  
 FOR THE TRANSCULTURAL NURSING SOCIETY  
 MEMPHIS TN UNITED STATES  
 OFFICIAL JOURNAL OF THE TRANSCULTURAL  
 NURSING SOCIETY.  
 INDEXING BEGAN WITH VIN1,1989.-  
 ON ORDER 1043-6596  
 SR0066712 JC: AIZ  
 JOURNAL OF TRANSCULTURAL  
 NURSING,SUBSCRIPTION SERVICES,UNIVERSITY  
 OF TENNESSEE,COLLEGE OF NURSING,877  
 MADISON,MEMPHIS TN 38163

IM MICROBIOLOGIA  
 MICROBIOLOGIA  
 IN1/2,SEP 1985--  
 SOCIEDAD ESPANOLA DE MICROBIOLOGIA  
 MADRID SPAIN  
 FREQUENCY 2Y FROM VIN1, 1985; 3Y FROM V3N1,  
 1987--.  
 INDEXING BEGAN WITH VIN1-2,SEP 1985.  
 W1 MI266 0213-4101  
 SR0057005 JC: AIF  
 SOCIEDAD ESPANOLA DE MICROBIOLOGIA,C/  
 VITRUVIO 8,28006 MADRID,SPAIN

IM MOLECULAR BIOTHERAPY  
 MOL BIOTHER  
 1,1988--  
 BUTTERWORTHS  
 STONEHAM MA UNITED STATES  
 INDEXING BEGAN WITH VIN1,1988.  
 W1 M0196DC 0952-8172  
 SR0062621 JC: AH5

IM MOLECULAR NEUROBIOLOGY  
 MOL NEUROBIOL  
 IN1-2,SPRING-SUMMER 1987--  
 HUMANA PRESS  
 CLIFTON NJ UNITED STATES  
 VOL. 1, NO. 1-2 ALSO CALLED SPECIAL  
 INAUGURAL DOUBLE ISSUE.  
 INDEXING BEGAN WITH VIN1-2,1987.  
 W1 M0196P 0893-7648  
 SR0062900 JC: AH6  
 HUMANA PRESS,CRESCENT MANOR,PO BOX  
 2148,CLIFTON NJ 07015

INI NURSING THE ELDERLY  
 NURS ELDER  
 1,1988--  
 HAMILTON PRESS ENGLAND  
 PRESTON  
 INDEXING BEGAN WITH V2N2,JULY 1989.  
 ON ORDER 0956-8115  
 SR0066636 JC: AIH  
 SCUTARI SUBSCRIPTION HOUSE,ROBJOHNS  
 FARM,VICARAGE ROAD,FINCHINGFIELD ESSEX  
 CM7 4LJ,ENGLAND

IM PSYCHOLOGY AND AGING  
 PSYCHOL AGING  
 IN1,MAR 1986--  
 AMERICAN PSYCHOLOGICAL ASSOCIATION  
 ARLINGTON VA UNITED STATES  
 INDEXING BEGAN WITH VIN1,MAR 1986.  
 W1 PS746JL 0882-7974  
 SR0055237 JC: AH7  
 AMERICAN PSYCHOLOGICAL ASSOCIATION,1400  
 N.UHLE ST.,ARLINGTON VA 22201

IM RESEARCH REPORT / HEALTH EFFECTS INSTITUTE  
 RES REP HEALTH EFF INST  
 N1,AUG 1985--  
 HEALTH EFFECTS INSTITUTE  
 CAMBRIDGE MA UNITED STATES  
 INDEXING BEGAN WITH N1,AUG 1985.  
 W1 RE234AWCD  
 SR0063116 JC: AH8  
 HEALTH EFFECTS INSTITUTE,215 FIRST  
 STREET,CAMBRIDGE MA 02142

INI SPVN  
 SPVN  
 1,1983?--  
 SOCIETY FOR PERIPHERAL VASCULAR NURSING  
 NORWOOD MA UNITED STATES  
 INDEXING BEGAN WITH V7N2, JUN 1989.  
 IN PROCESS  
 SR0064741 JC: AIG  
 SOCIETY FOR PERIPHERAL VASCULAR  
 NURSING,NATIONAL AND EDITORIAL  
 OFFICES,309 WINTER ST,NORWOOD MA 02062

TITLE CHANGES, OCTOBER 1989

IM DRUG SAFETY  
 DRUG SAF  
 5,1990--  
 ADIS PRESS  
 AUCKLAND NEW ZEALAND  
 CONTINUES: MEDICAL TOXICOLOGY AND ADVERSE  
 DRUG EXPERIENCE.  
 ON ORDER  
 SR0066578 JC: AHQ

IM GENETIC COUNSELING  
 GENET COUNS  
 38N1,1990--  
 MEDECINE ET HYGIENE  
 GENEVA SWITZERLAND  
 CONTINUES: JOURNAL DE GENETIQUE HUMAINE.  
 ON ORDER  
 SR0066696 JC: AIV

IDL JOURNAL OF THE GREATER HOUSTON DENTAL SOCIETY  
 J GT HOUST DENT SOC  
 61N1,1989--  
 GREATER HOUSTON DENTAL SOCIETY  
 HOUSTON TX UNITED STATES  
 CONTINUES: JOURNAL OF THE HOUSTON DISTRICT DENTAL SOCIETY.  
 W1 J0926P  
 SR0066653 JC: AIL

HLI JOURNAL OF MEDICAL HUMANITIES  
 J MED HUMANIT  
 10N1,SPRING-SUMMER 1989--  
 HUMAN SCIENCES PRESS  
 NEW YORK UNITED STATES  
 CONTINUES: JOURNAL OF MEDICAL HUMANITIES AND BIOETHICS.  
 W1 J075NJ 1041-3545  
 SR0066665 JC: AIN

HLI MEDICINE AND HEALTH  
 MED HEALTH  
 43N41,OCT 16 1989--  
 FAULKNER AND GRAY  
 WASHINGTON UNITED STATES  
 CONTINUES: MCGRAW-HILLS MEDICINE AND HEALTH.  
 IN PROCESS  
 SR0066758 JC: AI2

IDL ODONTOSTOMATOLOGIA E IMPLANTOPROTESI  
 ODONTOSTOMATOL IMPLANTOPROTESI  
 198?--  
 ODONTOSTOMATOLOGIA E IMPLANTOPROTESI  
 MILANO ITALY  
 CONTINUES: RIVISTA DI ODONTOSTOMATOLOGIA E IMPLANTOPROTESI.  
 IN PROCESS  
 SR0066702 JC: AIW

TITLES NO LONGER INDEXED AS OF OCTOBER 1989

IM ARCHIVES OF GERONTOLOGY AND GERIATRICS  
 ARCH GERONTOL GERIATR  
 1N1,MAY 1982--  
 ELSEVIER BIOMEDICAL PRESS  
 AMSTERDAM NETHERLANDS  
 INDEXING BEGAN WITH V1N1,MAY 1982, AND CEASED WITH V9N3,NOV-DEC 1989.  
 W1 AR455AL 0167-4943  
 A60937000 JC: 7AX

IDL JOURNAL OF THE INTERNATIONAL ASSOCIATION OF DENTISTRY FOR CHILDREN  
 J INT ASSOC DENT CHILD  
 1,1970-17N1,APR 1986  
 INTERNATIONAL ASSOCIATION OF DENTISTRY FOR CHILDREN  
 LONDON ENGLAND  
 INDEXING BEGAN WITH 1N1,SEP 1970.  
 W1 J0931VF 0309-6858  
 J24540000 JC: IHE

IM GERONTOLOGY AND GERIATRICS EDUCATION  
 GERONTOL GERIATR EDUC  
 1N1,FALL 1980--  
 HAWORTH PRESS  
 NEW YORK UNITED STATES  
 EARLIER VOLS PUBLISHED BY UNIVERSITY OF TEXAS PRESS.  
 INDEXING BEGAN WITH V1N1,1980, AND CEASED WITH V9N4,1989.  
 W1 GE585KF 0270-1960  
 G06149000 JC: FPC

HLI JOURNAL OF PHARMACEUTICAL MARKETING AND MANAGEMENT  
 J PHARM MARK MANAGE  
 1N1,FALL 1986--  
 HAWORTH PRESS  
 NEW YORK UNITED STATES  
 INDEXING BEGAN WITH V1N1,FALL 1986 AND CEASED WITH V3N4,1989.  
 W1 J0829H 0883-7597  
 SR0057425 JC: JOP

HLI GHAA JOURNAL  
 GHAA J  
 7N1,SPRING 1986-10N1,1989  
 GROUP HEALTH ASSOCIATION OF AMERICA  
 WASHINGTON UNITED STATES  
 CONTINUES: THE GROUP HEALTH JOURNAL.  
 W1 GH37H 0888-4250  
 SR0057561 JC: FAO

HLI PREVENTION IN HUMAN SERVICES  
 PREV HUM SERV  
 1N1/2,FALL/WINTER 1981--  
 HAWORTH PRESS  
 NEW YORK UNITED STATES  
 CONTINUES: COMMUNITY MENTAL HEALTH REVIEW.  
 INDEXING BEGAN WITH V6N2,1988.  
 W1 PR497 0270-3114  
 P24230000 JC: PA8

IM GODISNJAK VOJNOMEDICINSKE AKADEMIJE  
 GOD VOJNOMED AKAD  
 26,1984--  
 GRO KULTURA  
 BEOGRAD YUGOSLAVIA  
 SPINE TITLE: GODISNJAK VMA. CONTINUES: ZBORNIK VOJNOMEDICINSKE AKADEMIJE.  
 INDEXING BEGAN WITH V29,1987.  
 W1 G0414J 0352-664X  
 SR0056732 JC: FXG

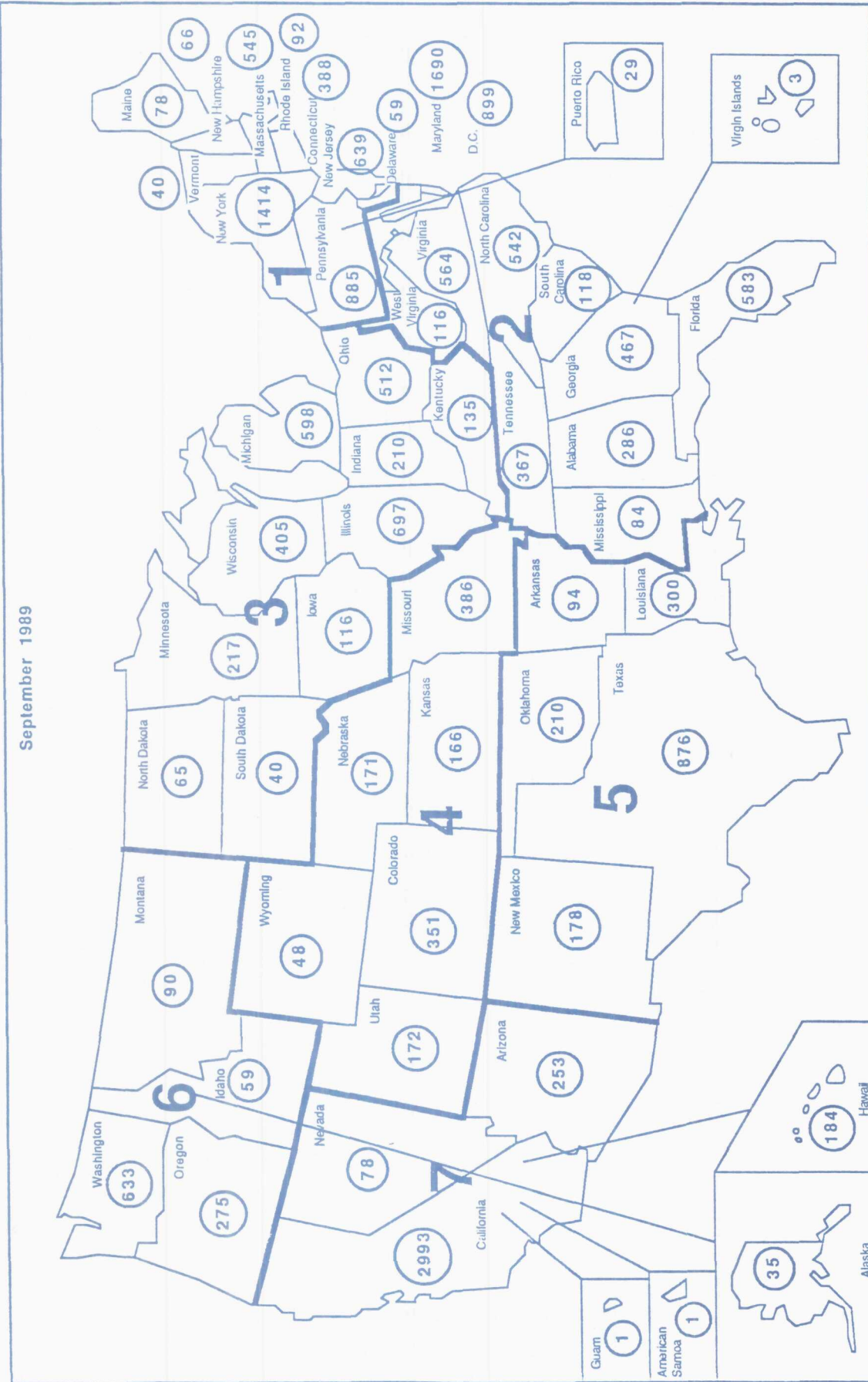
HLI PUBLIC AFFAIRS REPORT  
 PUBLIC AFF REP  
 1,1960--  
 UNIVERSITY OF CALIFORNIA, BERKELEY,  
 INSTITUTE OF GOVERNMENTAL STUDIES  
 BERKELEY CA UNITED STATES  
 THIS TITLE IS NOT IN THE NLM COLLECTION.  
 INDEXING BEGAN WITH V21N2, APR 1980 AND CEASED WITH V29N4,1988.  
 AHA 0033-3417  
 P56680000 JC: QIZ

IM SYMPOSIUM ON FUNDAMENTAL CANCER RESEARCH  
 SYMP FUNDAM CANCER RES  
 IST,1947-39TH,1986  
 UT PRESS  
 AUSTIN TX UNITED STATES  
 SPONSORED BY THE UNIVERSITY OF TEXAS SYSTEM  
 CANCER CENTER M. D. ANDERSON HOSPITAL AND  
 TUMOR INSTITUTE.  
 INDEXING BEGAN WITH 36TH SYMPOSIUM, 1983.  
 W3 SY5177 0190-1214  
 S52240000 JC: SFC

IM ZFA. ZEITSCHRIFT FUR ALTERNRSFORSCHUNG  
 ZFA  
 29,1974--  
 VEB VERLAG VOLK UND GESUNDHEIT  
 BERLIN GERMANY, EAST  
 CONTINUES ZEITSCHRIFT FUR ALTERNRSFORSCHUNG.  
 V29,1974-V32,1977 PUBLISHED BY VERLAG  
 THEODOR STEINKOPFF, DRESDEN.  
 INDEXING CEASED WITH V44N6,1989.  
 W1 Z115 0044-2224  
 Z07680000 JC: XSR

# National Library of Medicine Online Codes in the United States

September 1989



**Online Centers by Region:** Region 1 - 4,235    Region 2 - 5,719    Region 3 - 2,995    Region 4 - 1,294  
 Region 5 - 1,658    Region 6 - 1,092    Region 7 - 3,510    **TOTAL - 20,503**

CHANGE OF ADDRESS FORM  
(U.S. users only)

User ID Code \_\_\_\_\_ (Must be included)

Check here \_\_\_\_\_ if you purchased GRATEFUL MED.  
The new address information will be forwarded to NTIS.

New Billing Address: (please print or type)

Name: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

New NLM Technical Bulletin/GRATEFUL MED Address:

Name: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

**NOTE:**

This form **DOES NOT** change the address of Automatic SDIs or your stored address for offline prints. Call the MMS Service Desk for information on changing these addresses.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

Please affix current address label here:

Please mail this form to:

MEDLARS Management Section  
National Library of Medicine  
8600 Rockville Pike  
Bethesda, MD 20894

# THE NLM

GRATEFUL MED Users  
English Only Guidelines - p.14

ISSN 0146-3055  
DECEMBER 1989

No. 248

# Technical Bulletin

## In This Issue:

**GRATEFUL MED Calls at  
the MEDLARS Management  
Service Desk** 1

**Sorting Retrieval and  
the Use of Precoded  
Sort Formats** 8

**The New 1990 MeSH and  
GRATEFUL MED** 15

**Appendix A: CompuServe Logon to Toxnet**  
**Appendix B: INFONET Logon to Toxnet**

**Enclosure: Letter Announcing  
CHEMLINE/TOXLIT Price Change**  
**Enclosure: Pricing Schedule**

### Regular Features:

Databases	2
Technical Notes	3
GRATEFUL MED	14
Serials Update	17

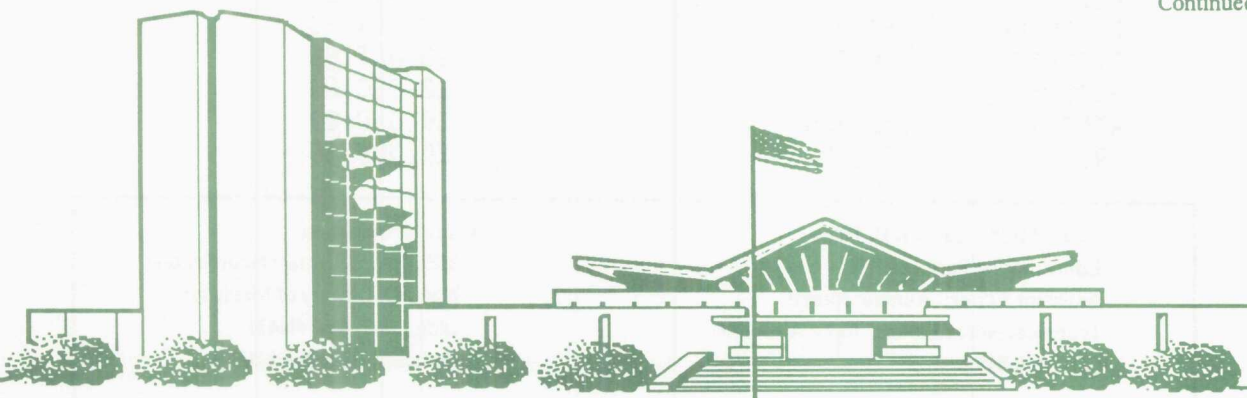
## GRATEFUL MED<sup>®</sup> Calls at the MEDLARS Management Section Service Desk

Catherine Soehner  
MEDLARS Management Section, NLM

NLM is always looking for ways to improve its products and services. One method currently used is to examine the kinds of calls users make to the MEDLARS Management Section (MMS) Service Desk. A study of calls received at the MMS Service Desk regarding GRATEFUL MED Version 4.0 was conducted directly following the release of this product. As a result of this analysis, recommendations were suggested for enhancing future versions and improving customer service.

The methodology for the study included the classification of questions received over the phone beginning December 19, 1988 and ending March 31, 1989 (70 working days). As calls were received at the MMS Service Desk, staff recorded the date, the user's questions or problems and the amount of time required for each phone call on "tally sheets". Questions written on the tally sheets were categorized into one of 176 categories; the 176 categories were grouped into three major

Continued on page 6





NLN TECHNICAL BULLETIN DEC 89

MEDLARS <sup>®</sup> DATABASE	TOTAL RECORDS	DATES COVERED	DATE LAST UPDATED	LATEST UPDATE TAG
ELHILL <sup>®</sup> COMPUTER				
AIDSDRUGS	57		16 OCT 89	
AIDSLINE** <sup>TM</sup>	24,520	JAN 80-DEC 89	06 NOV 89	8912(EM)
AIDSTRIALS	223		16 DEC 89	
AVLINE <sup>®</sup>	19,998	THROUGH 1989	28 DEC 89	
BIOETHICS <sup>®</sup>	28,802	JAN 73-DEC 89	16 DEC 89	8912(EM)
CANCERLIT <sup>®</sup>	701,132	JAN 63-NOV 89	04 NOV 89	8911(EM)
CATLINE <sup>®</sup>	655,742	THROUGH 1989	28 DEC 89	
CHEMLINE <sup>®</sup>	894,795		16 DEC 89	8912(EM)
CLINPROT <sup>®</sup>	7,629		22 DEC 89	8911(EM)
DENTALPROJ	776		28 JUN 89	
DIRLINE <sup>®</sup>	16,303		11 NOV 89	
DOCUSER <sup>®</sup>	11,765		23 DEC 89	
HEALTH	480,502	JAN 75-JAN 90	09 DEC 89	9001(EM)
HISTLINE <sup>®</sup>	91,857		16 DEC 89	8912(EM)
MEDLINE* <sup>®</sup>	567,342	JAN 88-JAN 90	09 DEC 89	9001(EM)
MED86	651,873	JAN 86-DEC 87	09 DEC 89	
MED83	890,600	JAN 83-DEC 85	09 DEC 89	
MED80	803,401	JAN 80-DEC 82	09 DEC 89	
MED77	775,781	JAN 77-DEC 79	09 DEC 89	
MED72	1,175,684	JAN 72-DEC 76	09 DEC 89	
MED66	1,310,563	JAN 66-DEC 71	09 DEC 89	
MESH VOC <sup>®</sup>	70,552	1990	30 DEC 89	
NAME AUTH <sup>®</sup>	340,129		23 DEC 89	
PDQ <sup>®</sup>		THRU NOV 89	01 NOV 89	
POPLINE <sup>TM</sup>	172,830	1970-DEC 89	16 DEC 89	8912(EM)
SDILINE <sup>®</sup>	29,672	FEB 90	30 DEC 89	9002(EM)
SERLINE <sup>®</sup>	73,658	1989	16 DEC 89	
TOXLINE <sup>®</sup>	751,067	1981-1989	16 DEC 89	8912(EM)
TOXLINE65	698,414	PRE 1965-1980	04 MAR 89	
TOXLIT <sup>TM</sup>	788,417	1981-1989	16 DEC 89	8912(EM)
TOXLIT65	586,405	1965-1980	01 SEP 87	

\*N.B. FILE IS UPDATED SEMI-MONTHLY; THIS IS PART 2 OF 2. \*\*N.B. FILE IS UPDATED THREE TIMES A MONTH; THIS IS PART 3 OF 3.

TOXNET COMPUTER

CCRIS	2,062		12 DEC 89
DBIR <sup>TM</sup>	1,101		12 DEC 89
EMICBACK	67,975		07 MAR 89
ETICBACK	46,374		15 OCT 88
HSDB <sup>®</sup>	4,202		12 DEC 89
RTECS <sup>®</sup>	101,505		19 DEC 89
TRI	76,737		20 NOV 89

Head, MMS: Carolyn B. Tilley  
 Editor: Toby Port  
 Assistant Editor: Annette Morris  
 Technical Notes Editor: Joyce A. Conner  
 (301) 496-6193

Direct Inquiries to:  
 MEDLARS Management Section  
 National Library of Medicine  
 Bldg., 38A, Rm. 4N421  
 Bethesda, Maryland 20894

## Technical Notes

Whenever applicable the heading of each Technical Note includes a reference to the section of the Online Services Reference Manual 1989 that is considered most relevant to the item being discussed, e.g., (Manual 4.7.2). Users should keep in mind that the item may pertain to other sections as well.

### MARTIN LUTHER KING'S BIRTHDAY HOLIDAY SCHEDULE

MONDAY JAN. 15

System	Rates/Status
ELHILL	non-prime/ non-guaranteed
TOXNET	non-prime/ guaranteed
DOCLINE	N/A/ non-guaranteed

#### Service Desks

MMS	not staffed
DOCLINE	not staffed

### PDQ TO RESTRICT AIDS INFORMATION

Beginning January 1, 1990 PDQ will revise its policy on listing AIDS protocols. With the January update, all AIDS protocols other than those treating AIDS-related cancers will be removed from the database and no new ones will be added. The decision to restrict AIDS information in PDQ was made in response to the availability of AIDS clinical trials information in the AIDSTRIALS database, available through MEDLARS. Most AIDS trials listed in PDQ are already available through the AIDSTRIALS database. Every effort will be made to ensure that all appropriate AIDS protocols are incorporated in the AIDSTRIALS database. PDQ will continue to list protocols treating AIDS-related malignancies.

Information in PDQ's cancer information file is also being revised to include cancer-related AIDS information only. Look for a new AIDS-related malignancy statement in early March or April.

### COMPUSERVE AND INFONET ACCESS TO TOXNET

TOXNET may now be accessed via the CompuServe and INFONET telecommunications networks. CompuServe and INFONET access procedures for the TOXNET system are included as Appendices A and B of this issue. (CompuServe and INFONET access procedures for the ELHILL databases were given in the April 1989 *Technical Bulletin*). To see if a local number is available for your area, check the Phones List enclosed with the September issue of the *Technical Bulletin*. Users should not feel that they HAVE to change their current access methods, but may use any of the four networks (Telenet, TYMNET, CompuServe, and INFONET). However, make sure the number is a local call. Keep in mind, also, there is no difference in cost for the different networks and the charges for all MEDLARS telecommunications are included in your MEDLARS invoice. Note: Non-GRATEFUL MED WATS users may use CompuServe WATS to access TOXNET and ELHILL, however, we must activate your access. Call the MEDLARS Management Section (MMS) Service Desk (800-638-8480) to request this.

GRATEFUL MED 4.0 users (IBM version) cannot access TOXNET through CompuServe and INFONET unless an updated TLOGSEQ file has been added to the users GRATEFUL MED subdirectory. The TLOGSEQ file is available on the GRATEFUL MED Bulletin Board System and from MMS. GRATEFUL MED for the Macintosh (Version 1.0) does not access the TOXNET system.

### MASTER ACCOUNTS

This spring (June 1989 issue of the *Technical Bulletin*) NLM announced the availability of "Master" accounts. In this program multiple codes can be billed to one "Master" account. The codes can either be existing codes or new codes "mapped" to a "Master" account. One summary invoice (or statement of account if you

have an NTIS deposit account) will be received for any month during which one of the "sub-account" codes has usage. However, all transaction detail, by database, for each code (connect time, interactions, characters, etc.) will continue to be provided, so that individual code usage can be tracked if desired.

The registered user for a code will continue to receive a separate invoice showing any outstanding balances for an existing code that has been added to a "Master" account until the outstanding balance is paid in full. All charges incurred on the code after it has been added to the "Master" account will be invoiced to the "Master" code. Therefore, two invoices for that code will be received until any outstanding balance is paid.

#### SEARCHING INSULIN & PROSTAGLANDINS X BY REGISTRY NUMBER

The MeSH heading Insulin was assigned a new CAS Registry/EC Number (RN) of 11061-68-0. However, class maintenance of the RN field did not occur on any older MEDLINE records indexed with the MeSH heading of Insulin. Therefore, older records (1966 through 8912 (EM)) have the old Registry Number of 9004-10-8. MEDLINE records entered since 9001 (EM) indexed to Insulin have the new RN of 11061-68-0.

If you wish to search Insulin by Registry Number, you must use both the old and the new Registry Numbers to be sure of complete retrieval. For example:

SS 1 /C?  
 USER:  
 (RN) 9004-10-8 or 11061-68-0

PROG:  
 SS (1) PSTG (5280)

Searchers using the MeSH heading Insulin are unaffected by the two registry numbers. Searching using the MeSH heading Insulin will retrieve all citations for insulin as shown below.

SS 2 /C?  
 USER:  
 (MH) insulin

PROG:  
 SS (2) PSTG (5280)

Therefore, searching by MeSH heading is simpler. NLM plans to replace the old Registry Number during class maintenance at the end of this year.

Also, the MeSH heading Prostaglandins X was assigned an RN of 35121-78-9. However, older MEDLINE records from MED77 through 8912 (EM) indexed to this heading were not class maintained to add the RN number. Therefore, in order to get complete retrieval, you should continue to search on the MeSH heading Prostaglandins X and not on the RN. This will be corrected during class maintenance at the end of the year.

#### ERRATUM IN THE NOVEMBER 1989 TECHNICAL BULLETIN - P. 13

In the example for the new feature, Title Word Searching in AVLINE and CATLINE, the qualifier in the second search statement should not be (TW) and should be replaced with (TF):

SS 2/C?  
 (TF) surgical and staff

PROG:  
 SS (2) PSTG (14)

#### 1990 MESH CHEMICAL TOOL

Medical Subject Headings--Supplementary Chemical Records, 1990 may now be ordered from NTIS. The order number is PB90-109869/GBB. Prices for hardcopy and microfiche are listed below:

Hardcopy - \$38.00 (U.S. and Canada); \$76.00 (non-U.S.)

Microfiche - \$18.50 (U.S. and Canada); \$37.00 (non-U.S.)

There is a \$3.00 (U.S. and Canada) shipping and handling charge required for each order (\$4.00 non-U.S.). Please send remittance with orders to:

National Technical Information Service (NTIS)  
5285 Port Royal Road  
Springfield, VA 22161  
(703) 487-4650 (for telephone orders with  
deposit account or credit card)

National Cancer Institute. Please include a self-  
addressed label with the request. No return postage is  
necessary. Please send requests to:

International Cancer Research Data Bank Branch  
National Cancer Institute  
R.A. Bloch Building (82), Room 103  
Bethesda, MD 20892

### CLINPROT INDEX TERM LISTING

The CLINPROT Index Term listing for January 1990 is  
now available. It may be requested by writing to the

GRATEFUL MED Calls

Continued from page 1

areas of concern for the user:

- (1) Administrative and Marketing (What is GRATEFUL MED?);
- (2) Use of GRATEFUL MED (How do I search with GRATEFUL MED); and
- (3) Equipment and Technical (Why isn't GRATEFUL MED working?).

See Figure 1.

There were 4,565 questions asked in a total of 3,551 calls received at the MMS Service Desk regarding GRATEFUL MED during the 70 day period. This was an average of 51 calls per day. The figures indicated that the number of calls concerning GRATEFUL MED increased between the months of December and January immediately following the release of the new version and then declined slightly in February and March. The number of calls also tended to be larger on the first day of any work week.

Comparing the GRATEFUL MED survey to the regular MMS Annual Service Desk Survey can bring some perspective to the numbers collected in this study. This survey uses a similar methodology to record questions, responses and approximate time of all calls received at the Service Desk during a two week period. A total of 1,893 calls were collected between the dates of February 27 and March 10, 1989, a period of 10 working days. This is an average of 189 calls per day with calls concerning GRATEFUL MED comprising 27% of the total.

**Administrative and Marketing**

Calls categorized under "Administrative and Marketing" were concerned with obtaining basic information about GRATEFUL MED and how to order a copy. Other queries included "Where is my updated version of GRATEFUL MED?" and "How do I access the Bulletin Board System?". There were 1,652 questions (36%) asked concerning Administrative and Marketing topics.

**Use of GRATEFUL MED**

The category "Use of GRATEFUL MED" contained questions regarding search strategies, filling out the GRATEFUL MED input form screen, and printing/reviewing citations. In this category, users

frequently asked how to access the BACK86 file (a file created following the reconfiguration of the 1988 Backfile) using earlier versions of GRATEFUL MED. Approximately 848 (19%) of the questions were classified into this category.

**Equipment and Technical**

The "Equipment and Technical" area received by far the largest number of questions. Queries were about installation, SETUP, computer error messages, telecommunications and downloading. There were 2,065 questions in this area or 45% of the total calls.

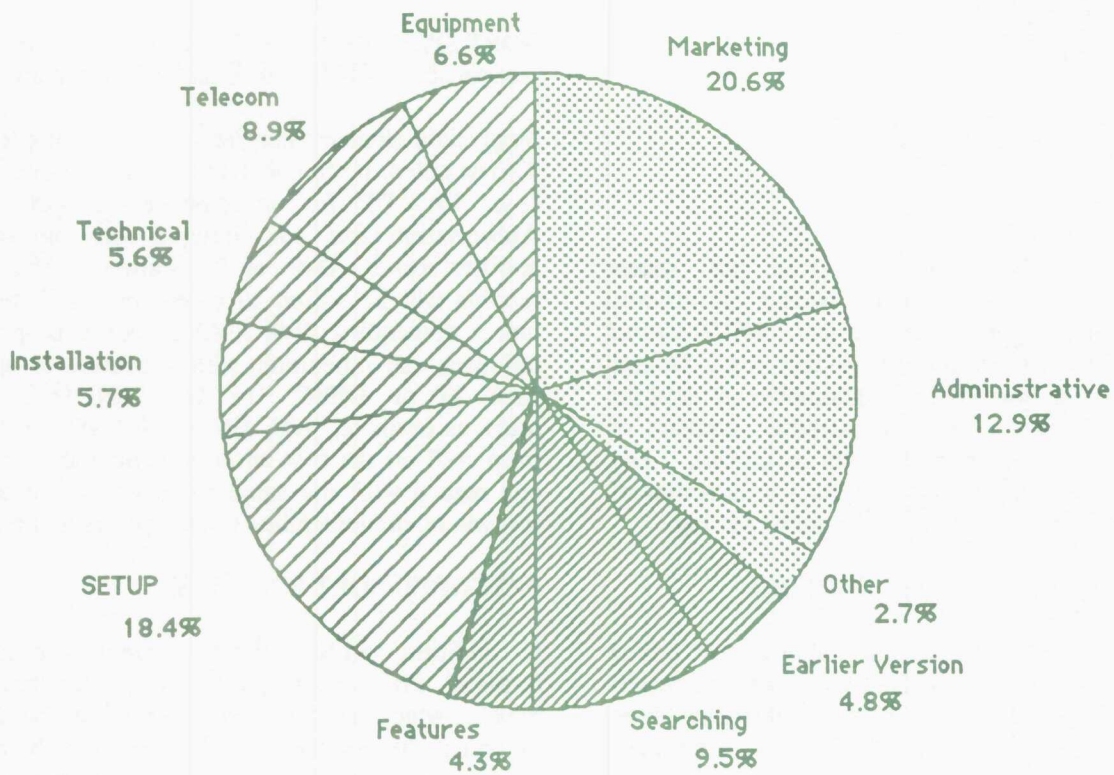
**Implementation of Changes**

As a result of this study, several recommendations were made for improving GRATEFUL MED and customer service for this product.

- 0 A user registration card has been sent out this Fall providing a better means for maintaining user addresses. The use of a general university or institution address when ordering GRATEFUL MED has complicated the distribution of updates to the appropriate individual. Users are requested to notify MMS of any changes of address, in order to receive their updates.
- 0 The information posted in the Bulletin Board Service should provide prompt responses to common problems and eliminate the need to call the MMS Service Desk. Basic information about GRATEFUL MED as well as fixes and solutions to common problems are included in bulletins and public mail. Users who check the BBS first may find their answers immediately.
- 0 Data from the study also demonstrated that answers to a large number of technical and equipment calls could not be found in the User's Guide. The User's Guide for Version 5.0 will contain a separate Troubleshooting Guide; this should help the user to discover solutions to common problems.

Similar studies will be conducted after each new release of the IBM and Macintosh versions of GRATEFUL MED. The use of a Service Desk to provide customer service allows a direct link to the user. The information gathered at the Service Desk is invaluable for continuing product enhancements and evaluation of GRATEFUL MED as a user friendly search tool.

### GRATEFUL MED QUESTIONS



#### Key to Major Categories

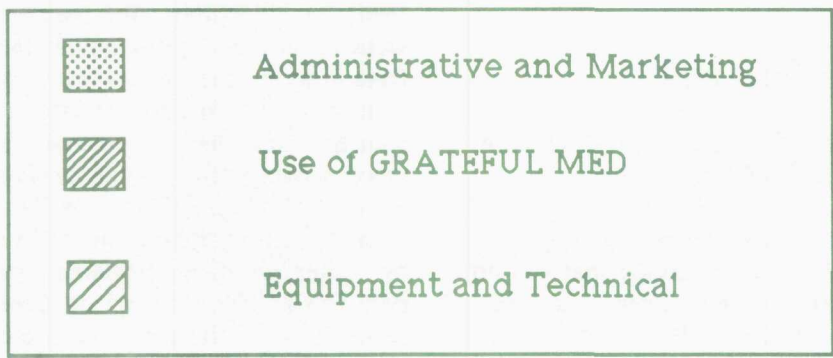


Figure 1

## Sorting Retrieval and the Use of Precoded Sort Formats

Jane L. Rosov  
MEDLARS Management Section, NLM

### ONLINE SORTING:

In November 1989, NLM introduced new system features which provide for online sorting of retrieved citations. Please refer to the October 1989 *Technical Bulletin* for articles on these new features. Several examples showing how to sort and combine retrieval for online printing and a detailed narrative summary of these features are contained in these articles. The information presented below provides a brief review of offline sorting and is also relevant to online sorting.

### SHORT REVIEW OF OFFLINE SORTING:

MEDLARS has provided for the ability to sort offline print retrieval since 1980. Both offline prints and results of OFFSEARCHES may be sorted. Retrieval from multiple databases, however, may not be combined offline as it now can be for online printing. To sort offline, enter the sort specification desired following 'SORT=' in response to the system prompt for requester's name or search title. For example:

```
PROG:
SEARCH TITLE, OR NONE-
USER:
sort=au, em desc
PROG:
SEARCH TITLE, OR NONE-
```

In this example, 'au, em desc' is the sort specification. A discussion of sort specifications follows below.

**Note:** To change a sort instruction already specified, type a new sort instruction. If you decide that you do not want your output sorted after all, type 'SORT=CANCEL' or 'SORT=NONE' at the next USER: cue.

If the printout has been truncated (cut off at 500 citations for a search statement in OFFSEARCH), the sort will not be carried out for that search statement only; other search statements in the same OFFSEARCH

which have retrieved fewer than 500 will be sorted. When a printout of a search statement is truncated, the citations will be printed in the normal offline order (most recently entered data is printed first).

**SORT SPECIFICATIONS:** (This information is applicable for both online and offline sorting.)

Single data elements may be used for sorting (e.g., TI or TA) as well as up to five data elements grouped together (e.g., TA, DP for an alphabetical sort on Title Abbreviation and, for citations with the same TA, another sort by Date of Publication). The retrieved records will be sorted in ascending (A-Z, 0-9) order unless descending (9-0, Z-A) sequence is specified by following the mnemonic with a comma or space and then, 'D' or 'DESC' or 'DESCENDING'. In the previous example, 'AU, EM DESC' will create a sort from A-Z on the first authors name and, if more than one record with the same name exists, the secondary sort will be on descending order of entry month.

### PRECODED SORT FORMATS:

In addition, NLM provides several precoded sort formats. Precoded sort formats are standardized sort formats which are recognized across all the databases for which they are defined. They provide the capability for sorting on the same concepts in different databases, even though the data element abbreviation (mnemonic) for those concepts are different in the various databases. For example, the precoded sort format AUTI (which is defined as a sort on AU, TI for MEDLINE and PN, CN, TI for CATLINE) would perform an alphabetical sort on the Author field of MEDLINE and the Personal Name field (or in it's absence, the Corporate Name field) for CATLINE, and then on Title. **If searchers want to sort and print online the combined retrieval from different databases whose structures are different, precoded sort formats should be used in place of specific data element mnemonics.** This will ensure more accurate and useful displays of the data being sorted. In the combined MEDLINE and CATLINE example, although the names to be sorted are designated by different data elements, the precoded AUTI performs an accurate sort on those names. If the sort requested was the single data element AU (which is defined for MEDLINE but not for CATLINE) or on the group AU, TI, all CATLINE records would have appeared at the top of the list. This is because records that do not contain the requested sorted data element will always appear first. The combined retrieval would not have been sorted as desired.

To specify a precoded sort format for offline printing, enter 'SORT=<format>' after the system prompt for search title. For online sorting, enter the format alone (without the 'SORT=' designation) in response to the request for sort specifications.

The list of all available precoded sort formats identifying the databases for which they are defined appears in Figure 1. Figure 2 presents the specific data elements which are used for each of the precoded sort formats.



PRECODED SORT FORMATS

NAME OF FORMAT	MEANING	DATABASES
AUTI	Author/Title	All except AIDS DRUGS, AIDSTRIALS, CHEMLINE, DIRLINE, DOCUSER, MESH, SERLINE
CALL	Call Number	AVLINE, CATLINE, SERLINE
JNL	Journal Source	All except AIDS DRUGS, AIDSTRIALS, AVLINE, CATLINE, CHEMLINE, CLINPROT, DENTALPROJ, DIRLINE, DOCUSER, MESH, NAME AUTHORITY,
LADA	Language/Date	All except AIDS DRUGS, AIDSTRIALS, BIOETHICS, CHEMLINE, CLINPROT, DENTALPROJ DIRLINE, DOCUSER, HISTLINE, MESH
NAME	Name of Substance	AIDS DRUGS
PERF	Performing Org.	DENTALPROJ
PROT	Protocols	AIDSTRIALS
PRTV	Print Version	MESH
PUBT	Publication Type	AIDSLINE, BIOETHICS, CANCERLIT,
PUTI	Publisher/Title	SERLINE
REGN	Registry Number	CHEMLINE
SOID	Secondary Source ID	POPLINE, TOXLINE, TOXLINE65, TOXLIT, TOXLIT65
SPLI	Special List	SERLINE
SUPP	Supporting Agency	DENTALPROJ
TIAU	Title/Author	All except AIDS DRUGS, AIDSTRIALS, CHEMLINE, DIRLINE, DOCUSER, MESH, SERLINE

Figure 1

NOTE: There are no precoded sort formats for DOCUSER and DIRLINE.

This figure updates the table in Section 5.4.4.1 of the NLM Online Services Reference Manual. Please refer to Figure 2 for details of the specific data elements included in these precoded formats.

DATA ELEMENTS CONTAINED IN PRECODED SORT FORMATS

The order of sorting is ascending, except for those data elements with a D next to them. Those data elements are sorted in descending order.

PRECODED  
FORMAT

**AUTI**

<u>DATABASES</u>	<u>ELEMENTS AND DIRECTION</u>
MEDLINE And Backfiles, AIDSLINE, CANCERLIT, HISTLINE, SDILINE, TOXLINE, TOXLINE65, TOXLIT, TOXLIT65,	AU, TI
BIOETHICS, HEALTH, POPLINE	AU, CN, TI
AVLINE, CATLINE,	PN, CN, TI
NAME AUTHORITY	SE, NA, ND
DENTALPROJ	IR, TI
CLINPROT	CH, TI

**JNL**

MEDLINE and Backfiles, AIDSLINE, SDILINE	TA, DP D, VI D, IP D, PG
HEALTH	TA, DP D, IM, VI D, IP D
CANCERLIT	TA, YR D, TI
BIOETHICS, TOXLINE, TOXLINE65, TOXLIT, TOXLIT65	SO
HISTLINE	TA, VI, TI
POPLINE	TJ, MI, DP D, IM, VI D
SERLINE	TI

Figure 2A

Figures 2A, 2B, and 2C update the table in Section 5.4.4.2 of the NLM Online Services Reference Manual.

For a full listing of data elements defined for each database, including the full name of each data element, type FILE INFORM and type Explain database name (i.e., Explain AIDSTRIALS).

<u>PRECODED FORMAT</u>	<u>DATABASES</u>	<u>ELEMENTS AND DIRECTION</u>
<b>LADA</b>		
	MEDLINE and Backfiles, AIDSLINE, AVLINE, CATLINE, HEALTH, POPLINE, SDILINE	LA, DA, TI
	NAF	LA, DA
	CANCERLIT, TOXLINE, TOXLINE65, TOXLIT, TOXLIT65	LA, EM, TI
	SERLINE	LA, TI
<b>CALL</b>		
	AVLINE, CATLINE, SERLINE	CA
<b>NAME</b>		
	AIDSDRUGS	NM
<b>PERF</b>		
	DENTALPROJ	PO, IR, TI
<b>PROT</b>		
	AIDSTRIALS	PNS
<b>PRVT</b>		
	MESH	NM, SH, MH
<b>PUBT</b>		
	AIDSLINE, CANCERLIT, BIOETHICS	PT, AU, TI PT, AU, CN, TI

Figure 2B

<u>PRECODED FORMAT</u>	<u>DATABASES</u>	<u>ELEMENTS AND DIRECTION</u>
<b>PUTI</b>		
	SERLINE	PU, TI
<b>REGN</b>		
	CHEMLINE	AN
<b>SOID</b>		
	TOXLINE, TOXLINE65, TOXLIT, TOXLIT65 <i>POPLINE</i>	SI
<b>SPLI</b>		
	SERLINE	LI, TI
<b>SUPP</b>		
	DENTALPROJ	SA, PO
<b>TIAU</b>		
	MEDLINE and Backfiles, AIDSLINE, CANCERLIT, HISTLINE, SDILINE, TOXLINE, TOXLINE65, TOXLIT, TOXLIT65	TI, AU
	BIOETHICS, HEALTH, POPLINE,	TI, AU, CN
	AVLINE, CATLINE	TI, PN, CN
	NAF	NA, ND, SE
	DENTALPROJ	TI, IR
	CLINPROT	TI, CH

Figure 2C



[Editor's Note: Each month the Technical Bulletin features a column concerning GRATEFUL MED, often consisting of questions/answers. Contributions for this column will be appreciated.]

*Question: Can you give me some guidelines for when I should use the ENGLISH ONLY restriction for my searches? What percentage of MEDLINE records are not in the ENGLISH language?*

Answer: Many searchers routinely use the ENGLISH ONLY restriction in their searches when instead they should consider the disadvantages of excluding citations to foreign language articles. First, approximately 25% of the citations in MEDLINE are to foreign language articles so you're missing a quarter of the database. Second, for some subjects the best or only published information comes from foreign language articles. Third, many foreign language articles include an English abstract. In many cases these abstracts will be included in MEDLINE, so by restricting to ENGLISH ONLY you may miss the opportunity to see interesting, useful abstracts.

Hint: Don't bother with ENGLISH ONLY when you're doing an author search.

*Question: Do you recommend that we install the HowTo tutorial program for the IBM version on a hard disk?*

Answer: If you are in a multiple user situation, e.g., a library or lab where lots of GRATEFUL MED users share a computer, it would be advisable to install the program onto a hard disk. This way interested users can "walk up" and use the HowTo at their convenience. If, on the other hand, you are a single user, and will only be using the HowTo one time or infrequently, you may simply want to run the program from the floppy disks rather than installing it. This will save you from taking up space on your hard disk. (Note: HowTo can be run directly from the floppies, unlike the GRATEFUL MED program which must be installed onto floppies before being used.)

*Question: After I run a search using my Macintosh, I try to print the results and get the error message:*

You must close  
an open results  
box to print.

Answer: This is because you are trying to print from a file that is already open and GRATEFUL MED will not allow you to do this. Instead, close the Results window and go to the File Menu and select Print. You will then get a dialog box from which you can select the file name you want to print.

Alternatively, you can highlight (by clicking and dragging) parts of the Results window, and then select Add to Print File from the File Menu. This way you can print the "Print File" without closing the Results window.

Reminder: If you have ordered an IBM version of GRATEFUL MED in the past and have not received the Version 5.0 registration card (for the 1990 IBM version) please call our Service Desk: 1-800-638-8480.

## The New 1990 MeSH and GRATEFUL MED

Bill Trefzger  
MEDLARS Management Section, NLM

Beginning in December, MEDLINE started using the 1990 MeSH vocabulary. Below you will find details on what to do if you are a GRATEFUL MED user, and want to reference the most recent vocabulary changes and additions. IBM-PC and Macintosh GRATEFUL MED users have different options; they are explained below, IBM-PC version first.

### GRATEFUL MED, IBM-PC version - 1990 MeSH Options:

Although GRATEFUL MED 5.0 will be released in February 1990, the MeSH vocabulary has already been updated online in MEDLINE and other files. This means that the MeSH file that is built into version 4.0 of GRATEFUL MED does not include the newest terms that were added to MeSH for 1990.

In most cases you should be able to perform searches without being affected by the changes in MeSH. The changes primarily represent 413 new terms added to the vocabulary.

The list of these new headings is available as a file on the GRATEFUL MED Bulletin Board (GM Bulletin Board). It can be downloaded easily. The file that you download will be just a simple list of the 413 new terms. You can print the list from DOS or from a word processor. The list **cannot** be added to the 1989 MeSH file used for version 4.0 of GRATEFUL MED.

Sign onto the GM Bulletin Board and follow these steps:

- 1) Enter Q to quit from the Bulletin Menu.
- 2) Enter F for Files from the Main Menu.
- 3) Enter D for Download from the Files Menu.
- 4) Enter 90MESH as the file name when prompted.
- 5) Press F8 when prompted by the GM Bulletin Board (Note: this file is in ASCII format; you can also download it as part of your online interaction by selecting the A for ASCII protocol instead of pressing F8).

To print the list, type "print 90mesh" from the DOS prompt of your GRATEFUL MED subdirectory.

NOTE: If you want to use one of these MeSH terms on a Subject line, be sure to precede the term with a forward slash (/).

For complete details on downloading files from the GM Bulletin Board, see bulletin #15 on the Bulletin Board.

For details on MeSH headings that have changed for 1990, see the October 1989 *Technical Bulletin*, pages 29-30.

You can also obtain a list of new terms added for the 1990 MeSH by requesting a copy from:

Public Information Office  
Attention: MeSH LIST  
National Library of Medicine  
8600 Rockville Pike  
Bethesda, MD 20894

### GRATEFUL MED for the Mac - 1990 MeSH Options:

The MeSH for the Macintosh version of GRATEFUL MED 1.0, is also for 1989 and also does not include the newest MeSH terms. A GRATEFUL MED version for the Macintosh including the 1990 MeSH will not be available until mid-1990.

In most cases you should be able to perform searches without being affected by the changes in MeSH. Mostly, the changes represent 413 new terms added to the vocabulary.

Macintosh users can also write to the address above to receive a free print copy of the newest MeSH terms. They can also obtain the newest MeSH terms from the GM Bulletin Board. The procedure is similar to above, but the file name is different (90MESH.MAC) and there are additional steps (which offer additional features).

Sign onto the GM Bulletin Board (a choice from the Search menu) and follow these steps:

- 1) Enter Q to quit from the Bulletin Menu.
- 2) Enter F for Files from the Main Menu.

3) Enter D for Download from the Files Menu.

4) Enter 90MESH.MAC as the file name when prompted.

5) Press A for ASCII when prompted for a protocol. Press enter at the next prompt. This will display the file online.

6) After you sign off of the GM Bulletin Board and are back in GRATEFUL MED, close the Results file, and open the file OUTPUT, which will contain the entire GM Bulletin Board session.

7) You can then select (by clicking and dragging) the parts of the online GM Bulletin Board session you want to keep, that is, the list of new MeSH terms.

8) Select Add to Print File from the File menu to save the list to a new file name, (e.g., "New 1990 MeSH Terms").

9) The resulting file can then be printed, or opened and referenced from GRATEFUL MED while creating a search. It **cannot** be appended to the current list of 1989 terms.

NOTE: You can "Copy and Paste" terms from this list into a Search window. However, you **MUST** include the forward slash which precedes the first character of the MeSH heading, for the term to be searched properly.

For details on MeSH headings that have changed for 1990, see the October 1989 *Technical Bulletin*, pages 29-30.

NOTE: Version 5.0 of GRATEFUL MED for the IBM-PC is scheduled to be released in February 1990. All purchasers of previous GRATEFUL MED versions can receive 5.0 for free. To notify the National Technical Information Service (NTIS) that you want to receive version 5.0, you must mail back a post card that was sent out in November to all GRATEFUL MED owners. If you purchased a previous version and have not received this post card, call MMS at 1-800-638-8480 to confirm your status as a registered user.

# Serials Update

## INDEXED TITLES UPDATE, DECEMBER 1989

The following titles cited in MEDLINE, HEALTH, and POPLINE have recently been selected for indexing, undergone a title change, or ceased publication. This list is not cumulative; the information provided is only for titles whose status has changed since the

last UPDATE. More detailed information may be found in SERLINE. For further information, please contact MMS or Ms. Esther Baldinger, (301) 496-1276, Technical Services Division, NLM.

## TITLES SELECTED FOR INDEXING, NOVEMBER 1989

- |   |  |
|---|--|
| <p>INI CRITICAL CARE NURSING CLINICS OF NORTH AMERICA<br/>CRIT CARE NURS CLIN NORTH AM<br/>1N1,MAR 1989--<br/>SAUNDERS<br/>PHILADELPHIA UNITED STATES<br/>SPINE TITLE: CRITICAL CARE NURSING CLINICS.<br/>ISSUES HAVE DISTINCTIVE TITLES.<br/>INDEXING BEGAN WITH V1N1,MAR 1989.<br/>W1 CR216NC 0899-5885<br/>SR0063187 JC: AJU</p> | <p>IDL ISRAEL JOURNAL OF DENTAL SCIENCES<br/>ISR J DENT SCI<br/>1N1,1987?--<br/>ISRAEL DENTAL ASSOCIATION<br/>TEL AVIV ISRAEL<br/>OFFICIAL JOURNAL OF THE ISRAEL DENTAL ASSOCIATION.<br/>INDEXING BEGAN WITH V2N1,MAY 1988.<br/>W1 IS63SI<br/>SR0063136 JC: AJG</p>  |
| <p>IDL DENTISTRY TODAY<br/>DENT TODAY<br/>1,1972?--<br/>DENTISTRY TODAY<br/>MONTCLAIR NJ UNITED STATES<br/>NLM COLLECTS VOL. 8,1989-<br/>INDEXING BEGAN WITH V8N3,APR 1989.<br/>ON ORDER 8750-2186<br/>D05265000 JC: AJQ<br/>DENTISTRY TODAY,20 CHURCH ST.,MONTCLAIR NJ 07042</p>   | <p>HLI PART A NEWS<br/>PART A NEWS<br/>5N8,AUG 1987--<br/>UNITED COMMUNICATIONS GROUP<br/>BETHESDA MD UNITED STATES<br/>NLM COLLECTS 1989- . CONTINUES:<br/>PROSPECTIVE PAYMENT GUIDE, WHICH IS NOT IN THE NLM COLLECTION.<br/>INDEXING BEGAN WITH V7N1,JAN 1989.<br/>ON ORDER 8756-3274<br/>SR0061985 JC: AJS<br/>UNITED COMMUNICATIONS GROUP,4550 MONTGOMERY AVE.,SUITE 700N,BETHESDA MD 20814</p> |
| <p>IDL FUTURE DENTISTRY<br/>FUTURE DENT<br/>1N1,1985--<br/>FOUNDATION FOR THE ADVANCEMENT OF COSMETIC DENTISTRY<br/>SANTA MARIA CA UNITED STATES<br/>NLM COLLECTS VOL 4,1988-<br/>INDEXING BEGAN WITH VOL. 4N1,JUL 1988.<br/>ON ORDER<br/>SR0066939 JC: AJT</p>   | <p>IDL REVISTA DEL ATENEO ARGENTINO DE ODONTOLOGIA<br/>REV ATENEO ARGENT ODONTOL<br/>16,1980?--<br/>ATENEO ARGENTINO DE ODONTOLOGIA<br/>BUENOS AIRES ARGENTINA<br/>NLM COLLECTS 1989- . CONTINUES: REVISTA ORTOPEDIA MAXILAR.<br/>INDEXING BEGAN WITH V22N2, APR-OCT 1987.<br/>IN PROCESS 0326-3827<br/>SR0066922 JC: AJV</p>  |

## TITLE CHANGES, NOVEMBER 1989

- |  |   |
|--|---|
| <p>POP CURRENT POPULATION REPORTS, SERIES P-26.<br/>POPULATION ESTIMATES AND PROJECTIONS<br/>CURR POPUL REP P-26<br/>N88-A,AUG 1989--<br/>U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS<br/>WASHINGTON UNITED STATES<br/>CONTINUES: CURRENT POPULATION REPORTS.<br/>SERIES P-26, LOCAL POPUALTION ESTIMATES.<br/>W2 A B93C<br/>C56643500 JC: AI9</p> | <p>IDL DENTAL OFFICE<br/>DENT OFF<br/>1N1,MAY 1989--<br/>STEVENS PUBLISHING<br/>WACO TX UNITED STATES<br/>CONTINUES: DENTAL ASSISTING.<br/>IN PROCESS<br/>SR0066852 JC: AJL</p> |
|--|---|



IDL FOCUS ON OHIO DENTISTRY  
 FOCUS OHIO DENT  
 63N1, JAN 1989--  
 OHIO DENTAL ASSOCIATION  
 COLUMBUS OH UNITED STATES  
 CONTINUES: NEWSNOTES / OHIO DENTAL  
 JOURNAL, WHICH IS NOT IN THE NLM  
 COLLECTION. INTERNUMBERED WITH: OHIO  
 DENTAL JOURNAL.  
 IN PROCESS 1042-2528  
 SR0066369 JC: AJY

INI JOURNAL OF PEDIATRIC ONCOLOGY NURSING  
 J PEDIATR ONCOL NURS  
 6N3, 1989--  
 W.B. SAUNDERS FOR THE ASSOCIATION OF  
 PEDIATRIC ONCOLOGY NURSES  
 PHILADELPHIA PA UNITED STATES  
 CONTINUES: JOURNAL OF THE ASSOCIATION OF  
 PEDIATRIC ONCOLOGY NURSES. OFFICIAL  
 JOURNAL OF THE ASSOCIATION OF PEDIATRIC  
 ONCOLOGY NURSES.  
 W1 J0828EP 1043-4542  
 SR0066783 JC: AI4

TITLES NO LONGER INDEXED AS OF NOVEMBER 1989

IM AUSTRALIAN JOURNAL OF BIOLOGICAL SCIENCES  
 AUST J BIOL SCI  
 6N1, FEB 1953-41, 1988  
 COMMONWEALTH SCIENTIFIC AND INDUSTRIAL  
 RESEARCH ORGANIZATION  
 EAST MELBOURNE AUSTRALIA  
 CONTINUES AUSTRALIAN JOURNAL OF SCIENTIFIC  
 RESEARCH. SERIES B: BIOLOGICAL SCIENCES.  
 ISSUED BY THE COMMONWEALTH SCIENTIFIC AND  
 INDUSTRIAL RESEARCH ORGANIZATION IN  
 COLLABORATION WITH THE AUSTRALIAN NATIONAL  
 RESEARCH COUNCIL.  
 W1 AU623 0004-9417  
 A75330000 JC: 9EO

IM COMPREHENSIVE GERONTOLOGY. SECTION B,  
 BEHAVIOURAL, SOCIAL AND APPLIED SCIENCES  
 COMPR GERONTOL [B]  
 IN1, MAR 1987-3, 1989  
 MUNKSGAARD  
 COPENHAGEN DENMARK  
 VOL. 3, 1989 CONSISTS OF ONLY ONE COMBINED  
 ISSUE FOR SECTIONS A AND B, CALLED  
 SUPPLEMENTARY.  
 INDEXING BEGAN WITH VIN1, MAR 1987.  
 W1 C0452PN 0902-008X  
 SR0060213 JC: COB

IM COMPREHENSIVE GERONTOLOGY. SECTION A,  
 CLINICAL AND LABORATORY SCIENCES  
 COMPR GERONTOL [A]  
 IN1, FEB 1987-3, 1989  
 MUNKSGAARD  
 COPENHAGEN DENMARK  
 VOL. 3, 1989 CONSISTS OF ONLY ONE COMBINED  
 ISSUE FOR SECTIONS A AND B, CALLED  
 SUPPLEMENTARY.  
 INDEXING BEGAN WITH VIN1, FEB 1987.  
 W1 C0452P 0902-0071  
 SR0057922 JC: COG

IM COMPREHENSIVE GERONTOLOGY. SECTION C,  
 INTERDISCIPLINARY TOPICS  
 COMPR GERONTOL [C]  
 1, 1987-2, 1988  
 MUNKSGAARD  
 COPENHAGEN DENMARK  
 INDEXING BEGAN WITH VI, DEC 1987.  
 W1 C0452PQ 0902-0098  
 SR0060214 JC: COA

HLI GHAA JOURNAL  
 GHAA J  
 7N1, SPRING 1986-10N1, MAY 1989  
 GROUP HEALTH ASSOCIATION OF AMERICA  
 WASHINGTON UNITED STATES  
 CONTINUES: THE GROUP HEALTH JOURNAL.  
 W1 GH37H 0888-4250  
 SR0057561 JC: FAO

TOXNET ACCESS VIA COMPUSERVE AND INFONET  
LOGON/LOGOFF PROCEDURES

**COMPUSERVE**

Note:

Items in **bold** should be input.  
(CR) = Enter or Carriage Return key.  
XYZ01/PASSWORD = your User ID Code & Password.

LOGON PROCEDURES:  
(Full Duplex)

1. Dial number; connect phone to terminal.
2. **(CR)**
3. 13DCI  
HOST NAME:
4. **TOXNET (CR)**
5. Connected to 01TOXNET
6. WELCOME TO THE NATIONAL LIBRARY OF MEDICINE'S  
TOXICOLOGY DATA NETWORK
7. PLEASE ENTER USERID/PASSWORD  
**XYZ01/PASSWORD (CR)**

LOGOFF PROCEDURES:

1. USER:
2. **stop y (CR)**
3. TIME 0:00:00  
NLM TIME 18:25:47  
.  
.  
Disconnected from 01TOXNET  
  
Host Name:
4. **off** ("off" can be used to hang up  
the phone connection.)

Note: For Half Duplex enter 'toxnet (CR) at "HOST NAME:"  
prompt.

TOXNET ACCESS VIA COMPUSERVE AND INFONET  
LOGON/LOGOFF PROCEDURES

INFONET

Note:

Items in **bold** should be input.

(CR) = Enter or Carriage Return key.

XYZ01/PASSWORD = your User ID Code & Password.

LOGON PROCEDURES:

(Full Duplex)

1. Dial number; connect phone to terminal.
2. **(CR) (CR)**
3. # (The system will prompt with a # symbol.)
4. **c (CR)** (Enter the letter c and (CR). You will not see your entry with Full Duplex.)
5. PORT: 49  
CENTER:
6. **TN (CR)**
7. COMMUNICATION ESTABLISHED
8. **(CR)**
9. WELCOME TO THE NATIONAL LIBRARY OF MEDICINE'S  
TOXICOLOGY DATA NETWORK

PLEASE ENTER USERID/PASSWORD  
**XYZ01/PASSWORD**

LOGOFF PROCEDURES:

1. USER:
2. **stop y (CR)**
3. TIME 0:00:00  
NLM TIME 18:25:47  
  
CLR PAD

The "c," which may be upper or lower case, is a terminal recognition character which identifies the terminal type, baud rate, delay, and any special handling requirements. The "c" specifies speeds from 110 to 2400 baud with zero delay. It is applicable to any ASCII device.

**Full Duplex** must be used with INFONET access to TOXNET; ^P (Ctrl P) will not switch duplex for TOXNET users of INFONET.

Flow Control is not available with INFONET access to TOXNET.

National Institutes of Health  
National Library of Medicine  
Bethesda MD 20894

December 13, 1989

Dear Domestic MEDLARS User:

This is to notify you that on January 1, 1990, the pricing structure of CHEMLINE and the TOXLIT files (TOXLIT and TOXLIT65) will be modified in response to changes in the 1990 royalty rates charged by Chemical Abstracts Service (CAS), the supplier of proprietary data for these files.

To accommodate these changes, the NLM Online Pricing Algorithm has been updated in the Connect Charge, Search Statement Charge, and Citation Charge components. Based on usage patterns in 1989, we estimate that the approximate average hourly rate in Prime Time for CHEMLINE will be \$107, and that for TOXLIT and TOXLIT65 will be \$171. An individual's actual hourly rate will vary, of course, based on total resources used.

This year CAS has lowered its Connect Charge royalty, and raised its Online Citation Charge and Search Statement Charge royalties. The latter serves as an estimate of the number of Search Terms used. These changes are reflected in the updated NLM Online Pricing Algorithm.

Please see Table I on the reverse side of this letter for the new NLM rates for the six components of the online algorithm. Additionally, note that offline page charges have been changed due to royalty charges. NLM has not increased any of its component charges for these files. The NLM portion of the total charge reflects the rate established for the October 1, 1987 MEDLARS Pricing Structure.

Sincerely yours,



Lois Ann Colaianni  
Associate Director  
Library Operations



Henry M. Kissman, Ph.D.  
Associate Director  
Specialized Information Services.

(over)

TABLE I

New NLM Rates for CHEMLINE, TOXLIT, TOXLIT65

EFFECTIVE January 1, 1990

NLM ONLINE PRICING ALGORITHM CHARGES TO DOMESTIC USERS 1/

Files	Connect Charge (Per Hour)		Search Statement Charge	Online Citation Charge	Interaction Charge (Carriage Returns)	Computer Resources (Disk Accesses) (Per 100)		Online Character Charge (Per 1,000)	
	Non-Prime	Prime				Non-Prime	Prime	Non-Prime	Prime
CHEMLINE	\$36.10*	\$38.85*	\$0.34*	\$0.46*	\$0.01	\$0.07	\$0.13	\$0.08	\$0.12
TOXLIT & TOXLIT65	\$36.10**	\$38.85**	\$0.63**	\$0.46**	\$0.01	\$0.07	\$0.13	\$0.08	\$0.12

\* Includes Royalty of \$31.00 Per Connect Charge, \$0.32 per Search Statement, \$0.45 Per Online Citation Charge

\*\* Includes Royalty of \$31.00 Per Connect Charge, \$0.61 per Search Statement, \$0.45 Per Online Citation Charge

NLM OFFLINE CHARGES TO DOMESTIC USERS 1/

	Per Page	
CHEMLINE	\$1.33	(Includes \$1.08 Royalty Charge)
TOXLIT & TOXLIT65	\$1.33	(Includes \$1.08 Royalty Charge)

AUTOMATIC SDI SEARCHES (plus page charges)

TOXLIT	\$5.00	Per search (Includes \$4.00 Royalty Charge)
--------	--------	---

Current prime time is 10:00 AM to 5:00 PM Eastern Time, Monday through Friday.  
All other time is non-prime.

1/ Non-U.S. online users incur charges under the online pricing algorithm and are charged \$3.00 extra on the connect charge portion (per hour), and \$0.10 extra per offline printed page.

CHANGE OF ADDRESS FORM  
(U.S. users only)

User ID Code \_\_\_\_\_ (Must be included)

Check here \_\_\_\_\_ if you purchased GRATEFUL MED.  
The new address information will be forwarded to NTIS.

New Billing Address: (please print or type)

Name: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

New NLM Technical Bulletin/GRATEFUL MED Address:

Name: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

Note: This form DOES NOT change the address of Automatic SDIs  
or your stored address for offline prints. Call the MMS  
Service Desk for information on changing these addresses.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

Please affix current address label here:

Please mail this form to:

MEDLARS Management Section  
National Library of Medicine  
8600 Rockville Pike  
Bethesda, MD 20894

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service, National Institutes of Health  
National Library of Medicine (#38/4N-421)  
8600 Rockville Pike  
BETHESDA, MARYLAND 20894

U.S. DEPARTMENT OF H.H.S.  
POSTAGE AND FEES PAID  
HHS-396

FIRST-CLASS MAIL  
POSTAGE & FEES  
PAID  
PHS/NIH/NLM  
BETHESDA, MD  
PERMIT No. G291

Official Business  
Penalty for Private Use \$300