New ELHILL® command for continuous printing

Introduction

The continuous printing capability for ELHILL is here at last! There are now two ways for command language searchers to decrease the number of continue printing prompts sent by ELHILL. You may modify the PAGELENGTH in your search profile (an old capability) or you may issue a continuous print command to eliminate the prompt completely (a new capability). This article will describe both functions, beginning with the newest.

Printing continuously with a new command - $SET PRINT CONTINUOUS

ELHILL searchers have long requested the ability to receive their search retrieval uninterrupted by system CONTINUE PRINTING prompts. A new command, $SET PRINT CONTINUOUS, now provides that capability.

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

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Technical Notes

Procedure change: training and demonstration codes to be requested from Online Training Centers

A limited number of non-billed User ID codes/passwords are made available to MEDLARS users for:

- demonstrating the MEDLARS databases
- practicing new ELHILL command features
- teaching a course on searching MEDLARS databases
- teaching online searching using the Grateful Med software
- teaching or participating in the Basics of Searching MEDLINE course/workbook

In the past, all requests for training and demonstration codes were made to the MEDLARS Management Section. Beginning in 1994, these requests should be made to the three Online Training Centers. Appendix A contains the new “Request for Demonstration/Training Code(s)” form. The form should be mailed or faxed to the Online Training Center serving your state (as indicated on the back of the request form). Please allow 1-2 weeks processing time. If you need to call, simply follow the instructions on the form.

In addition, trainers should also complete the “Profile of Participants” form in Appendix B at the conclusion of their class(es). One form should be completed for each participant and returned to your Online Training Center.

Designation of author rank in MEDLINE and related databases

Previously, designation of author rank within a family, such as James A. Smith II, James A. Smith III, etc., was represented in MEDLINE using 2d or 3d after the surname. For example, James A. Smith II is cited as Smith JA 2d. NLM is changing the way author rank is cited to be consistent with the second edition of Anglo-American Cataloguing Rules, Second Edition 1978 (AACR2) guidelines for author rank: II and III will be 2nd and 3rd, respectively. Designations of 4th for IV remain unchanged. Because the CATLINE and AVLNE databases already cite authors as AACR2 does, this should facilitate bibliography creation that merges data from these files with MEDLINE data.

This change will only affect 1994 MEDLINE data forward. Please keep this in mind when consulting older examples of author names, such as might be found in the National Library of Medicine Recommended Formats for Bibliographic Citation. Examples used in the next edition of the National Library of Medicine Recommended Formats for Bibliographic Citation will reflect the new policy.

Searching for author names should not be affected if you are using the preferred technique of truncating after the first initial, which allows for variations of the same author’s name. To minimize false drops, consider ANDing with other key information or NEIGHBORing and SELECTing first.

Scientific integrity review publication type

The NIH Guide to Grants and Contracts [1993 Jun 25; 22(23):1-4], which is indexed for MEDLINE and HEALTH, published its first announcement of findings of scientific misconduct. This became the first citation (UI - 93290921) to be tagged by the Publication Type (PT) SCIENTIFIC INTEGRITY REVIEW in MEDLINE, and it is linked to 10 previously indexed MEDLINE citations in the Comment (CM) field. The citation appears as follows when the PT is printed with the citation (e.g. : PRT include PT):

UI - 93290921
TI - Final findings of scientific misconduct [comment]
CM - Comment on: Comp Biochem Physiol [C] 1975 Aug 1;51(2):165-7
CM - Comment on: Comp Biochem Physiol [C] 1975 Aug 1;51(2):169-70
CM - Comment on: Arch Gen Psychiatry 1988 Jul;45(7):673-7
CM - Comment on: Biol Psychiatry 1988 Dec;24(8):865-85
CM - Comment on: J Clin Invest 1989 Jan;83(1):90-4
CM - Comment on: Biochem Biophys Res Commun 1989 Jul 14;162(1):381-6
CM - Comment on: Diabetes 1989 Dec;38(12):1643-6
CM - Comment on: Cell 1991 Mar 22;64(6):1103-10
PT - COMMENT
PT - SCIENTIFIC INTEGRITY REVIEW
Rubric for corrected and republished items

Effective with 1994 publication dates, when an article is corrected and republished NLM will index the new version, give it a CORRECTED AND REPUBLISHED ARTICLE Publication Type (PT), and add a [corrected and republished...] title rubric. This rubric may also be accompanied by other helpful information, as in the following examples:

TI - Transdermal iontophoretic peptide delivery: in vitro and in vivo studies with luteinizing hormone releasing hormone [corrected and republished with original paging, article originally printed in J Pharm Sci 1993 Mar;82(3):240-3]
PT - CORRECTED AND REPUBLISHED ARTICLE
PT - JOURNAL ARTICLE
SO - J Pharm Sci 1993 May;82(5):240-3

If it is a corrected and republished letter, it may look like this:

TI - Manuscript review in family medicine [letter] [corrected and republished letter originally printed in Fam Med 1993 Apr;25(4):225]
PT - CORRECTED AND REPUBLISHED ARTICLE
PT - LETTER

Rubrics are explanatory comments designed for MEDLINE users to distinguish a particular type of article from another. A rubric itself makes no judgment; it merely identifies to searchers the nature of the subject matter for their information. We will retain the original citation, which will also have a rubric [corrected and republished in...] added to its title. The original will not bear any special Publication Type; the rubric will be the only indication of a revised version. NLM’s previous policy was to delete the original citation that was in error as a safeguard to anyone retrieving it instead of the republished and corrected one. Now, however, the rubric can act as an alert to the existence of a revised version.

To find CME quizzes

Beginning with 9311 (EM) data, Continuing Medical Education (CME) quizzes will now be included in MEDLINE if attached to an article. The quiz will be cited with the pagination in the source field, for example:

AU - Epstein CD ; Henning RJ
TI - Oxygen transport variables in the identification and treatment of tissue hypoxia.
EM - 9312

If you know that a quiz was in a certain year of a certain journal, you may search for it in the following way using STRINGSEARCHing (because the pagination field is not directly searchable):

SS 1 /C?
USER: heart lung (ta) and 93 (yr)
PROG: SS (1) PSTG (57)

SS 2 /C?
USER: ts (pg) :quiz:
PROG: SS (2) PSTG (1)

Similarly, if you need to find a quiz on a particular topic, STRINGSEARCH for quiz in the pagination field (as shown in SS2 of the example above) as the last search statement in your subject strategy.

Searching for Clinical Problem-Solving in the New England Journal of Medicine

Beginning with Volume 329, 1993, of the New England Journal of Medicine, NLM has enhanced the article title for the journal’s Clinical Problem-Solving feature. This is being done by beginning the citation title with the words “Clinical problem-solving” followed by a period and then the broad title, as in the following example:

Old Way: TI - One more hypothesis.
New Way: TI - Clinical problem-solving. One more hypothesis.

This New England Journal of Medicine feature presents information about a real patient to an expert clinician who responds to the information. Each one of these Clinical Problem-Solving features has its own title; however, that title is generally a broad non-descriptive title (e.g., One More Hypothesis) and not of much use when trying to search for this article in MEDLINE. In
the past, the NLM policy has been to carry the individual broad title, but not the generic feature title of Clinical Problem-Solving. The presence of the standardized feature title in the MEDLINE Title (TI) field will permit a simple TF (Title Field Text Words) ANDed with the Title Abbreviation (TA) to retrieve all of these articles, e.g.:

(tf) clinical and problem and solving and n engl j med (ta)

which can then be quickly scanned for one of interest or further ANDed with a MeSH heading to narrow the retrieval. To avoid getting letters, comments or other publications types that are responses to the feature, but not the feature itself, add AND NOT with the Publication Types and mnemonics. For example:

USER:
(tf) clinical and problem and solving and n engl j med (ta)

PROG:
SS (1) PSTG (43)

SS 2 /C?
USER:
1 and not letter (pt) and not comment (pt)

PROG:
SS (2) PSTG (4)

SS 3 /C?
USER:
prt 2 compr include pt

PROG:

1
UI - 93382472
AU - Pauker SG ; Kopelman RI
TI - Clinical problem-solving. A rewarding pursuit of certainty.
PT - JOURNAL ARTICLE

2
UI - 93347756
AU - Duffy TP
TI - Clinical problem-solving. The sooner the better.
PT - JOURNAL ARTICLE

AIDSTRIALS and AIDSDRUGS updated

The AIDSTRIALS and AIDSDRUGS databases were updated on November 13, 1993. With this update, the scope of the AIDSTRIALS database has been expanded to include epidemiology studies. This is reflected in the expansion of the TRIAL CATEGORY (TCAT) field to include the new searchable value EPIDEMIOLOGY. Epidemiology studies are defined as non-treatment studies in which the primary purpose is to assess factors affecting frequency and distribution of the disease, long-term consequences of disease progression, psychosocial and behavioral determinants related to trial compliance, natural history of the disease, or any other non-treatment evaluations. Other searchable values in the TCAT field are:

CHILD
PREGNANCY
HIV INFECTION, ASYMPTOMATIC
HIV NEGATIVE
OPPORTUNISTIC INFECTIONS
AIDS-RELATED MALIGNANCIES
NEUROLOGIC MANIFESTATIONS
VACCINES
TREATMENT IND
NATIONWIDE ACCESS

The following search example shows how to locate Epidemiology Studies:

USER:
epidemiology (tcat)

PROG:
SS (1) PSTG (3)

SS 2 /C?
USER:
prt 2

PROG:

1
UI - NIH/00558
PNS - NIAID HATS PROSPECTIVE
TI - Heterosexual HIV Transmission Project (HATS) Prospective Cohort Study.
TCAT - Epidemiology

2
UI - NIH/00546
PNS - NIAID HATS COUPLES
TI - Heterosexual HIV Transmission Study (HATS).
TCAT - Epidemiology
Canadian Domestic Substances List (DSL) indicator added to CHEMLINE

The 1993 regeneration of CHEMLINE in October 1993 introduced a new value, DSL, in the Locator (LO) field. DSL stands for the Canadian Domestic Substances List, which is produced by the New Substances Division, Commercial Chemicals Branch, Environment Canada organization. Similar in concept to the EPA Toxic Substance Control Act Inventory of Chemical Substances (TSCAINV) in the U.S., the Domestic Substance List fulfills a requirement under the Canadian Environmental Protection Act (CEPA) to create a list of substances manufactured or imported into Canada, in Canadian commerce, or used for commercial manufacturing purposes in Canada. Until the DSL addition, the locator designations in CHEMLINE pointed only to other NLM databases or to the TSCAINV. A searcher may now also search the LO field of CHEMLINE for the DSL substances. For example:

YOU ARE NOW CONNECTED TO THE CHEMLINE (ROYALTY) FILE.

SS 1 /C?
USER: dsl (lo)

PROG:
SS (1) PSTG (21551)

SS 2 /C?
USER: prt 1

RN - 129893-28-3
N1 - Peanut oil, glycerol trioleate-enriched, sulfated, potassium sodium salt
LO - DSL

1994 Tumor Key available

A new edition (1994) of the Technical Notes: MEDLARS Indexing Instructions, Tumor Key Supplement ("Tumor Key") is now available from the National Technical Information Service (NTIS). The new Tumor Key reflects substantial changes in 1994 MeSH indexing for Category C4, NEOPLASMS, to be consistent with the World Health Organization’s International Classification of Diseases for Oncology (ICD-O), 2nd edition. The Tumor Key is useful for searchers seeking appropriate MeSH headings for our databases for both cancerous and benign (non-cancerous) tumors. Orders for the Technical Notes: MEDLARS Indexing Instructions, Tumor Key Supplement should be sent to NTIS.

To order documents from NTIS, you may use the order form in Appendix H of the January-February 1993 Technical Bulletin. Orders should be sent to:

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

Individuals with an NTIS deposit account or major credit card who wish to order by phone may call 800-423-9255.

Order Number: PB94-107703/GBB

Hardcopy Price: $19.50 (U.S./Canada/Mexico) $39.00 (other countries)

Microfiche Price: $9.00 (U.S./Canada/Mexico) $18.00 (other countries)

There is a $3.00 (U.S./Canada/Mexico) shipping and handling charge required for each order ($4.00 for other countries), and an additional charge of $7.50 for orders placed with a purchase order. Remittance or deposit account number should be sent with all mail orders.

GENE-TOX Reference Guide revised

The GENE-TOX Reference Guide has been revised. Single copies of this guide, dated September 1993, are available at no charge by sending a self-addressed mailing label to:

GENE-TOX Representative
Specialized Information Services
National Library of Medicine
8600 Rockville Pike
Bethesda, MD 20894
New Genetic Testing and Genetic Screening paper available

The National Reference Center for Bioethics Literature at Georgetown University’s Kennedy Institute of Ethics has recently published Genetic Testing and Genetic Screening, Scope Note 22 of their Scope Note Series. The first six pages provide background information about the development and uses of genetic testing and screening, and the remaining 11 pages contain annotated references to the literature.

Scope Note 22, by Pat Milmoe McCarrick, also appears in the Kennedy Institute of Ethics Journal 3(3):333-354, September 1993. The separate reprint version, with the complete list of titles in the series, is available for $5.00 prepaid from the Kennedy Institute. Add $3 each for airmail outside North America.

The Scope Note Series offers an overview to topics in biomedical ethics and provides immediate reference to facts, opinions, or legal precedents (if applicable). All sources cited in Scope Notes are included in the collection of the National Reference Center for Bioethics Literature, and may be obtained through its document delivery service (subject to copyright law). Updates of topics covered in the Scope Note Series may be obtained by searching the BIOETHICSLINE database or by calling the National Reference Center for Bioethics Literature. Requests or questions should be directed to:

National Reference Center for Bioethics Literature
Kennedy Institute of Ethics
Georgetown University
Washington, DC 20057-1065
800-MED-ETHX or 202-687-6738

1994 Training class schedule changes

- The January 27, 1994 MEDLARS: Refresher & Review Workshop in Cleveland, Ohio has been rescheduled to March 9, 1994.

- The February 8-10, 1994 Fundamentals of MEDLARS Searching class and the February 11 MEDLINE/MeSH/HEALTH Specialized Module scheduled for Houston, Texas have been canceled. At this time, there are no plans to reschedule these classes.

- Newly scheduled MEDLARS: R&R Workshops:
  - March 28, 1994 Wheeling, IL (Chicago, IL area)
  - March 29, 1994 Lexington, KY

NLM Update Satellite Broadcast

The final broadcast time for the 1994 NLM Update Satellite Broadcast on January 21, 1994 will be 12:00 p.m. - 3:00 p.m. ET (3 hours). We expect MLA Continuing Education credit will be offered to attendees. Please contact your NN/LM Regional Medical Library at 800-338-7657 if you have questions or would like to register your site for the broadcast. The sites that have signed up will be mailed instructions for receiving the broadcast, the final agenda and CE materials in early January.
To display retrieval without a CONTINUE PRINTING prompt, at any USER: prompt, enter the command:

USER:

$SET PRINT CONTINUOUS

When this command is executed, ELHILL automatically, and behind the scenes, answers “YES” to all CONTINUE PRINTING? (YES/NO) prompts. Note that the above command simply turns on the continuous printing capability for the current online session. It is not a PRINT command; it does not tell the computer to begin printing, or how many citations you want printed, or what format to print. Please note that commands beginning with a $ are commands acted on by the operating system for the NLM ELHILL computer. You may remember other $ commands, $DSLIST and $DSPURGE, that were discussed in the Automatic SDI Service article on pages 25-33 of the September-October 1993 Technical Bulletin. The $ distinguishes operating system commands from regular ELHILL search commands, such as PRINT, EXPLAIN, etc.

At any subsequent USER: prompt you then enter a specific PRINT command, for the format and the number of citations you wish to print. The entire command sequence is shown below:

USER:
$set print continuous
• ELHILL also recognizes a shortened form of this command: $SET PRT C

USER:
prt 25 ar
• PRT AR in MEDLINE means print the following fields: UI, AU, TI, RF, CM, AB, SO

Turning off the continuous printing mode

You remain in continuous printing mode during an online search session until you turn it off with the $SET PRINT DEFAULT command. To turn off the continuous print function, at any USER: prompt, enter:

USER:
$set print default
• ELHILL recognizes a shortened form of this command: $SET PRT D

After receiving the above command, at the next PRINT command, ELHILL will again prompt the user to CONTINUE PRINTING? (YES/NO) after the number of lines set in the PAGELENGTH setting has been sent or the 25 citation ceiling has been reached.

To verify the print mode you are currently using, enter the command $SET. The system will respond in one of the two ways shown below, depending on which mode you are in:

USER:
$set
• This is the system response if you are in continuous print mode

OR IF

$set
• you are in a regular print mode

General Comments

The $SET PRT C command is session specific. This means that in order to print continuously, the $SET PRT C command must be given each time a user logs into ELHILL. A user may turn the continuous print capability on and off as often as required within a search session, using the appropriate commands, e.g.,

$SET PRT C to start continuous print
$SET PRT D to return to standard ELHILL print
$SET to verify current printing mode.

Advanced $SET print commands

$SET PRT n: Multiples of PAGELENGTH Setting

As an alternative to the new $SET PRT C command, you may consider the following approach to see fewer, or no CONTINUE PRINTING prompts. A user can now increase the number of lines sent before the CONTINUE
PRINTING prompt to **any multiple** of the PAGELENGTH value. The maximum number of lines to which PAGELENGTH can be set remains unchanged at 100.

If PAGELENGTH is set to 100, then the number of lines sent can be increased to 200, 300, 400, 500, etc. If PAGELENGTH is set to 25, the number of lines sent can be increased to 50, 75, 100, etc.

Use the new **$SET PRT n** command to increase the number of lines sent to a multiple of the PAGELENGTH value. The PAGELENGTH value will be multiplied by \(n\) to determine the number of lines to be sent before the CONTINUE PRINTING prompt.

Example:

\[\text{$SET PRT 5$} \quad \text{specifies } 5 \times \text{PAGELENGTH value} \]

i.e., if PAGELENGTH=100, then 5 x 100 lines, or 500 lines, will be sent before the CONTINUE PRINTING prompt is sent.

The ELHILL command to change PAGELENGTH is discussed later in this article.

**Permanent continuous print mode**

\[\text{$SET PRT C \text{ SAVE}$} \quad \text{$SET PRT n \text{ SAVE}$} \]

You may save your preferred continuous print mode (either continuous, or some multiple of your PAGELENGTH value) from session to session. When either “permanent” command is in effect, the system sends a reminder at the start of the online session, just before the welcome message:

**REMEMBER:** You are currently in the CONTINUOUS PRINT mode. To return to standard ELHILL print output enter: $SET PRINT DEFAULT at any USER: prompt.

**OR**

**REMEMBER:** You are currently set for 5 automatic print continuous. To return to standard ELHILL print output enter: $SET PRINT DEFAULT at any USER: prompt.

NLM is pleased to make these advanced features available, but advises users to exercise caution when using them! Any $SET PRT SAVE command may be canceled at any time by entering $SET PRINT DEFAULT ($SET PRT D), or any other new $SET PRT command. Limited testing at NLM shows the worst case scenario (1,165 MEDLINE references including abstracts requested to be printed continuously and the user disconnects before all the references were received) to be about $100.00. Of course, if this is done in a MEDLARS royalty file, your entire year’s search budget may be spent for one search. See Warning on Page 10.

**Troubleshooting problems**

The most frequently encountered problem with the print continuous function will probably be due to the limitations of the hardware and software at the user’s end. NLM testing of the print continuous function showed that most printers cannot keep up with the speed and volume of data being sent. When print buffers become filled, data are often garbled on the printer, or the screen, or both. Users are responsible for knowing, or finding out, the capabilities and limitations of their own equipment and telecommunications software.

Users should be more successful when capturing data to disk, using a commercial telecommunications software package, such as Smartcom, or Procomm Plus. Accessing MEDLARS via communications services such as TYMNET or Telenet/SprintNet rather than dialing direct, will also allow searchers to take advantage of flow control capability (see below).

There is no ELHILL command or break character to suspend or stop transmission of data. Searchers must determine what, if anything, they can do at their end to stop data in the event of an erroneous Print command. If a break signal is entered (this signal varies depending on the communications software and user equipment) you will most likely be dropped entirely from your ELHILL session and you’ll have to login again. After reconnecting, you may not be placed back into the same search environment you were in when you sent the break signal.

**Flow control**

MEDLARS Management Section staff suggests that searchers download retrieved references first to disk
(hard disk or floppy) using their telecommunications software and then print their results from there. Alternatively, if you want to try to print continuously and simultaneously capture the search results on your printer, we suggest use of flow control.

Flow control is the capability that enables the terminal to prevent further receipt of data until its buffer has emptied and is capable of storing more data. This capability is often important for hard copy terminals and microcomputer set-ups that may have slow print speed and small buffers which may result in lost data. We’ve included some information here on flow control that may assist users with stopping and starting data being sent in response to a continuous printing instruction.

The NLM host computer does not support flow control signals (X-ON, X-OFF or DC1, DC3). However, some telecommunications networks will perform the flow control if instructed to do so. This involves setting the ITI (Interactive Terminal Interface) parameter 12 to 1; which means switching 12 to “on.” The procedures are different for each network.

Once the flow control condition has been established, the user may send a Control-S (hold the key marked Ctrl while the pressing the S key) to stop the flow of information, and Control-Q (hold the key marked Ctrl while pressing the Q key) to resume the flow manually or rely on the terminal to send the data control signals. NOTE: The X-ON, X-OFF capability must be enabled in the terminal to send these signals automatically.

**Flow control procedures:**

**Direct Dial (local users only)**
The ELHILL computer does not support X-ON, X-OFF (or DC1, DC3); no flow control is possible.

**CompuServe**
No flow control is possible.

**Telenet/SprintNet:** involves setting the ITI parameter 12 from 0 (the default) to 1.
1. Log in to SprintNet and go all the way to the ELHILL USER cue.
2. Escape to the SprintNet command level by depressing the @ key followed by a carriage return (CR).
3. SprintNet will respond with another @ cue.
4. Enter SET 12:1 (CR).
5. SprintNet will respond with an @ sign.
6. Enter CONT (CR) to return to ELHILL.
7. While online searching, Control-S will stop the flow, and Control-Q will resume the flow of information.

**TYMNET**
1. After the PLEASE LOGIN prompt from TYMNET, enter Control-R to activate flow control before typing the host address NLM or NLMMENU.
2. While online searching, Control-S will stop the flow of information, and Control-Q will resume it.

**Warning - Important!**

When flow control is not possible, the user may literally have to break the connection, (that is, type a break character, or exit from telecommunications packages such as Procomm Plus, Smartcom, etc., or turn off their machines if the user realizes the Print command just issued is the wrong one, for whatever reason). Nonetheless, all the data will have already been sent by ELHILL, even if the searcher has not seen these data on the screen/printer at the time the connection was broken. If the print continuous command has been invoked and a disconnection occurs, the user will be billed for all characters prepared to be sent, even if they were not received at the user’s terminal.

Print continuous is an advanced feature and should be used with care. NLM will not issue credit for data that are sent, but then not received because a break signal has been sent by the user.

**Some print limits remain**

All searchers are cautioned that this new command permits much larger amounts of data to be sent, and therefore much larger online search charges to be generated, than before. ELHILL will still truncate retrieval from any one search statement at 1,165 citations.

**Practice codes available**

A limited number of non-billed codes and passwords are available for searchers to practice the new continuous
printing feature. Please call the your Online Training Center (800-338-7657, press #2) to arrange for a free code to use to become familiar with this capability. Codes will be limited to a 30-minute session and are intended for practice with the new continuous printing capability only. We want searchers to become comfortable with the new commands and this feature and to determine how their equipment will handle the data load.

Changing the PAGELENGTH in your profile

The following information explains the older method used to decrease the number of CONTINUE PRINTING prompts when printing references on ELHILL.

Note: Grateful Med Users should NOT modify their PAGELENGTH.

ELHILL online searchers use a PRINT command to view or print up to a maximum of 100 lines of data, or 25 citations (whichever comes first) from their retrieval, before the system interrupts the data transmission, and prompts the user:

CONTINUE PRINTING? (YES/NO)

The PAGELENGTH setting in the user’s profile determines how many lines of data are sent before the system sends this prompt. The default value programmed into the profile of every new User ID code is 25 lines of data. A user may modify this PAGELENGTH setting at any time permanently (or until the next modification), at any USER: prompt, using the PROFILE MODIFY command, as shown in the example:

USER:
PROFILE MODIFY PAGELENGTH

PAGELENGTH?
  x
  • where x = the number of lines to be printed before the system prompts for a continuation. The PAGELENGTH value may be set to any number from 10 to 100.

How is PAGELENGTH calculated?

ELHILL counts the number of citations it prints from in addition to the number of lines of data printed. The 25 citation limit takes precedence over the PAGELENGTH value as ELHILL decides when to send the CONTINUE PRINTING prompt.

For example, if you set PAGELENGTH to 100, retrieve 75 citations and give a PRT TI command, you will get a CONTINUE PRINTING prompt after 25 titles. This is because ELHILL counts the retrieval as 25 citations and not 25 lines. However, if you gave the command PRT DL, then the 100 line limit will go into effect before the 25 citation limit and you would see a CONTINUE PRINTING prompt after just a few citations.

Conclusion

Whether you use the new $SET command to invoke continuous printing or choose to modify your PAGELENGTH to decrease the number of CONTINUE PRINTING prompts, NLM hopes these features will make searching easier and more convenient for you.
Colons denoting diacritical marks online to be removed from ELHILL

Introduction

Beginning sometime in January 1994, the ELHILL system will no longer display the colons that denote diacritical marks in online printed references. Check the online NEWS around the last part of January for an update on the date of implementation. For those unfamiliar with them, a diacritical mark is a symbol added to a letter to show pronunciation. Examples are the German umlaut, the accent grave in French, or the Spanish cedilla. For MEDLARS data, it has been NLM’s convention to key the code for a diacritical mark before the letter that that mark modifies. For more information on diacritics, see the article on pages 39-43 in the May-June 1991 Technical Bulletin.

Background

Because most users’ terminals or computers cannot translate or print diacritical marks and to facilitate the transfer of data in a standard way, all characters denoting diacritics kept in NLM’s IBM mainframe ELHILL computer were being translated into colons (as a placeholder) for online displays. The colon was a signal that the next letter was modified by some diacritical mark. In the past, some searchers have been confused by the colons that appear in author names and vernacular titles when viewing online references. Although these colons are never used for searching (never appear in a database’s index), they nevertheless have led to confusion over the years when they appeared in citations retrieved online as shown below.

UI - 93390159
AU - Lind L
AU - Malstam J
AU - Skoog G
TI - [In spite of normal or increased heart minute volume, myocardial dysfunction is common in septic shock]
RF - REVIEW ARTICLE: 28 REFS.
TT - Trots normal eller förhöjd hjartminutvolym, myokarddysfunktion vanlig vid septisk chock.
SO - Lakartidningen 1993 Sep 1;90(35):2848-52

Because NLM codes the diacritical marks as part of data entry, this allows NLM to print the references with the proper diacritical marks in Index Medicus and other publications according to the placement conventions for particular languages. Special programs and print trains are needed to accomplish this. The printed Index Medicus citation below shows the previous online citation with the correct, graphical display of all the diacritical marks.

The diacritics cannot be translated online by most personal computers and terminals because ASCII, the convention used in asynchronous dial-up modem access with most online systems, only has 128 characters and diacritical marks are not handled. When NLM began testing the new ftp capability for Automatic SDI searches, we noticed that the diacritical marks in the computer files were being translated into all sorts of characters including degree marks, boxes, etc. depending on the user’s software and printer. The diacritical marks may also display online as various characters other than colons, depending on the user’s hardware and software. Therefore, only the data (stored in ELHILL in EBCDIC code) in the actual databases, offline prints and OFFSEARCH printouts will continue to indicate diacritical marks, along with NLM printed publications. The offprints from MEDLARS include the correct diacritical mark but, again, in front of the letter being modified. For online displays, and all data prepared for ftp transmission, the diacritics will be stripped out and the resulting space compressed.

Also, for online display purposes only, Polish “ł’s” and Swedish “ö’s” (these look similar to the letters you’re used to seeing, only they’re crossed with lines) will be displayed as English “l’s” and “o’s.” Formerly, colons were substituted for these letters in online displays; but English-language “l’s” and “o’s” were used in the database indexes displayed with the NEIGHBOR command. So, the author C. Jorgensen would be shown as Jorgensen C with the NBR command, but it would be shown as AU - J:rgensen C in the online display. Eliminating the use of the colon will avoid this inconsistent and therefore sometimes puzzling data display.

Special characters such as plus signs (+), greater than or lesser than signs (>, <), brackets, etc. are unaffected by
the changes discussed here. This is because they are part of the ASCII 128-character set.

**Special commands to turn diacritics translation on and off**

As mentioned above, the default display mode for the ELHILL system will soon be set to a condition so that colons denoting diacritics will disappear and Polish “ł’s” and Swedish “ö’s” will be shown as English “l’s” and “o’s” sometime in mid- to late-January. When this happens, you may use a new command if you want to continue to see the colons that indicate the presence of diacritics. This command will be similar to the VTAM $SET command used with the print continuous function (also announced in this issue) in the form of:

$SET TRANS NONE

to cause ELHILL to display a colon either preceding a letter to denote a diacritical mark or in place of a letter to denote a Polish “ł” or Swedish “ö” (you may add the word SESSION following the word NONE, but this is entirely optional)

The “trans none” means “no translation” or “no suppression” of diacritics; therefore the user will see colons denoting the diacritics. The above command is **session specific**. That is, you must type it in each time you access the system for the colons to appear in your printed references after the system default is changed in January.

If you wish to set your code to have colons denoting diacritics **permanently** displayed:

$SET TRANS NONE SAVE

adding the word “save” to the command permanently sets your code so that ELHILL will display the colons denoting diacritical marks for every online session (KEEP is a synonym for SAVE)

$SET TRANS DEFAULT SAVE may be typed in a session (following the one where $SET TRANS NONE SAVE was given) to restore the user’s code to the ELHILL system default. Remember, the system default will be to suppress the colons denoting diacritics. In addition, STANDARD, STD and REMOVE and DEF are synonyms for DEFAULT.

To see your current setting type:

$SET

And you’ll see a display similar to the following:

```
SET - Print: CONTINUOUS
      - Trans: DEFAULT
```

Note: The $ commands are not case sensitive; you may type $SET or $set, etc.

Here is a summary of the commands:

**$SET TRANS NONE**

for this session only, will cause ELHILL to display the colons preceding the letter, denoting a diacritic

**$SET TRANS DEFAULT**

for this session only, will cause ELHILL set the user’s profile to the system default of not displaying colons for diacritics

**$SET TRANS NONE SAVE**

for this and all subsequent sessions, will cause ELHILL to display a colon preceding the letter, denoting the presence of a diacritic

**$SET TRANS DEFAULT SAVE**

for this and all subsequent sessions, will cause ELHILL to restore the user’s profile to the system default of not displaying colons for diacritics

**$SET**

requests a display of the values for diacritics translation and continuous printing

**Conclusion**

In the future, changes in data transmission standards and in personal computer hardware may allow for the correct display of diacritics. When that day arrives, NLM will be able to send the actual diacritical marks for proper display on user equipment, because the stored data is coded to retain the diacritics, even though the colons that currently represent them will no longer display online or in data prepared for ftp transmission.

Remember, if you do not care about diacritical marks, you have no action to take. NLM will suppress them automatically for all users in late January 1994.
Revisions to the ID Number (ID) field

Introduction

The Identification Number (ID) field contains research grant numbers or contract numbers (or both) that designate financial support by any agency of the United States Public Health Service or any institute of the National Institutes of Health (NIH). A description of the expanded ID field and a table of the acronyms was last published in the September - October 1992 Technical Bulletin.

Changes in the table of acronyms

NLM has revised the table it uses to expand the grant information carried in the ID Number (ID) field in MEDLINE and related files (see Figure 2). The grant number is picked up exactly as is from the journal article: NLM enhances that data by isolating the 2-letter grant abbreviation and putting it in the second subelement of the ID field and by mapping that abbreviation to an institute acronym which is placed in the third subelement. In the sample ID number shown below, CA46677 is the grant number as it appears in the journal article, CA is the two-letter abbreviation isolated from the grant number and added as the second subelement, and NCI (acronym for the National Cancer Institute) is the third subelement representing the institute acronym.

ID - CA46677/CA/NCI

Searching on the ID field

All three pieces of the resulting ID field - full grant number as is, 2-letter grant abbreviation, and institute acronym - are searchable using the (ID) qualifier. Because the grant number format itself is not standardized, these standard grant and institute acronyms (e.g., CA and NCI) make global searching for articles supported by grants sponsored by a particular institute easier. Figure 1 shows examples of searches that illustrate the difference in searching these three ways.

Figure 1- Searching the ID Field

YOU ARE NOW CONNECTED TO THE MEDLINE (1990 - 93) FILE.

SS 1 /C?
USER:

USER: ca46677 (id)

PROG:
SS (1) PSTG (16)

SS 2 /C?
USER: prt 2 ui,ti,id

PROG:
1
UI - 93393549
TI - v-Src activates a unique phospholipase D activity that can be distinguished from the phospholipase D activity activated by phorbol esters.
ID - CA46677/CA/NCI
ID - RRO-3037-03/RR/NCRR
Figure 1 - Searching the ID Field cont.
How Institute acronyms are generated

The programs at NLM that generate the institute acronyms work by scanning the grant number for the first match on a legal 2-letter grant abbreviation. These programs are only as good as the data upon which they operate. If the author has neglected to provide a portion of the number (or even the entire number) or a part of the number is wrong (via author, publisher or NLM keyboarding error) then the resulting grant/institute acronyms may be in error.

NLM uses the abbreviation supplied by the Division of Research Grants, National Institutes of Health. A February 1991 version of these data was used to implement the search enhancements in December 1992. Since then, there have been enough additions and changes that NLM decided to make the additions and changes retrospectively. For the searcher, this means you can rely on the values in the revised table to search back though 1990 MEDLINE data.

Major differences in the revised table

A summary of the major differences in the revised table follows:

- the reorganization of the old ADAMHA (Alcohol, Drug Abuse and Mental Health Administration) into the new SAMHSA (Substance Abuse and Mental Health Services Administration) with parts of ADAMHA going to NIH (i.e., NIAAA, NIDA, and NIMH);
- additions under FDA (Food and Drug Administration);
- additions under CDC (Centers for Disease Control and Prevention);
- additions and several institute acronym changes under HRSA (Health Resources and Services Administration);
- grouping the Office of Population Affairs and Office of Minority Health together under the broader label of Office of the Assistant Secretary of Health (OASH) in the table (no effect on searching); and
- adding under NIH (National Institutes of Health) WH and WHI for the Women’s Health Initiative and changing the institute acronym from DS-ORS-OD to DS for Division of Safety.

Grant numbers limited to PHS institutes

Remember that NLM only picks up the ID grant number for institutes that are part of the Public Health Service (PHS). Therefore, any citation with an ID field will also have the MeSH heading SUPPORT, U.S. GOV’T, P.H.S. This is programmed as a validation check in the NLM input system. NLM does not carry grant numbers for other government institutions. While the ID field was introduced in 1981, the expansion of searching access by the 2-letter grant abbreviation and the institute acronym only goes back to 1990 in MEDLINE. For databases that have MEDLINE-derived data, the expanded ID field should be effective also back through 1990 when the 1994 revision of those files are brought up on or after December 13, 1993. For CANCERLIT, every ID field regardless of the date of publication of the article, will be expanded.
## POSSIBLE VALUES FOR THE GRANT ABBREVIATION & INSTITUTE ACRONYM SUBELEMENTS FOR THE ID FIELD IN MEDLINE (1990 FORWARD)

<table>
<thead>
<tr>
<th>Grant Abbreviation</th>
<th>Institute Acronym</th>
<th>Full Institute Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>NIAAA</td>
<td>National Institute on Alcohol Abuse and Alcoholism</td>
</tr>
<tr>
<td>AG</td>
<td>NIA</td>
<td>National Institute on Aging</td>
</tr>
<tr>
<td>AI</td>
<td>NIAID</td>
<td>National Institute of Allergy and Infectious Diseases</td>
</tr>
<tr>
<td>AM(^1)</td>
<td>NIADDK</td>
<td>National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases</td>
</tr>
<tr>
<td>AR</td>
<td>NIAMS</td>
<td>National Institute of Arthritis and Musculoskeletal and Skin Diseases</td>
</tr>
<tr>
<td>CA</td>
<td>NCI</td>
<td>National Cancer Institute</td>
</tr>
<tr>
<td>CO</td>
<td>NCI</td>
<td>Office of the Director</td>
</tr>
<tr>
<td>CN</td>
<td>NCI</td>
<td>Division of Cancer Prevention and Control</td>
</tr>
<tr>
<td>CB</td>
<td>NCI</td>
<td>Division of Cancer Biology and Diagnosis</td>
</tr>
<tr>
<td>CP</td>
<td>NCI</td>
<td>Division of Cancer Etiology</td>
</tr>
<tr>
<td>CM</td>
<td>NCI</td>
<td>Division of Cancer Treatment</td>
</tr>
<tr>
<td>CL</td>
<td>CLC</td>
<td>Clinical Center</td>
</tr>
<tr>
<td>CT</td>
<td>DCRT</td>
<td>Division of Computer Research and Technology</td>
</tr>
<tr>
<td>DA</td>
<td>NIDA</td>
<td>National Institute on Drug Abuse</td>
</tr>
<tr>
<td>DC</td>
<td>NIDCD</td>
<td>National Institute on Deafness and other Communication Disorders</td>
</tr>
<tr>
<td>DE</td>
<td>NIDR</td>
<td>National Institute of Dental Research</td>
</tr>
<tr>
<td>DK</td>
<td>NIDDK</td>
<td>National Institute of Diabetes and Digestive and Kidney Diseases</td>
</tr>
<tr>
<td>DS</td>
<td>DS</td>
<td>Division of Safety, Office of Research Services</td>
</tr>
<tr>
<td>ES</td>
<td>NIEHS</td>
<td>National Institute of Environmental Health Sciences</td>
</tr>
<tr>
<td>EY</td>
<td>NEI</td>
<td>National Eye Institute</td>
</tr>
<tr>
<td>GM</td>
<td>NIGMS</td>
<td>National Institute of General Medical Sciences</td>
</tr>
<tr>
<td>HD</td>
<td>NICHD</td>
<td>National Institute of Child Health and Human Development</td>
</tr>
<tr>
<td>HG</td>
<td>NCHGR</td>
<td>National Center for Human Genome Research</td>
</tr>
<tr>
<td>HL</td>
<td>NHLBI</td>
<td>National Heart, Lung, and Blood Institute</td>
</tr>
<tr>
<td>HV</td>
<td>NHLBI</td>
<td>Division of Heart and Vascular Diseases</td>
</tr>
<tr>
<td>HB</td>
<td>NHLBI</td>
<td>Division of Blood Diseases and Resources</td>
</tr>
<tr>
<td>HR</td>
<td>NHLBI</td>
<td>Division of Lung Diseases</td>
</tr>
<tr>
<td>HI</td>
<td>NHLBI</td>
<td>Division of Intramural Research</td>
</tr>
<tr>
<td>HO</td>
<td>NHLBI</td>
<td>Office of the Director</td>
</tr>
<tr>
<td>HC</td>
<td>NHLBI</td>
<td>Division of Epidemiology and Clinical Applications</td>
</tr>
<tr>
<td>LM</td>
<td>NLM</td>
<td>National Library of Medicine</td>
</tr>
<tr>
<td>MH</td>
<td>NIMH</td>
<td>National Institute of Mental Health</td>
</tr>
<tr>
<td>NR</td>
<td>NCNR</td>
<td>National Center for Nursing Research</td>
</tr>
<tr>
<td>NS</td>
<td>NINDS</td>
<td>National Institute of Neurological Disorders and Stroke</td>
</tr>
<tr>
<td>OD</td>
<td>NIH</td>
<td>Office of the Director</td>
</tr>
<tr>
<td>OR</td>
<td>ORS</td>
<td>Office of Research Services</td>
</tr>
<tr>
<td>RG</td>
<td>DRG</td>
<td>Division of Research Grants</td>
</tr>
<tr>
<td>RR</td>
<td>NCRR</td>
<td>National Center for Research Resources</td>
</tr>
<tr>
<td>RS(^2)</td>
<td>DRS</td>
<td>Division of Research Services</td>
</tr>
<tr>
<td>TW</td>
<td>FIC</td>
<td>Fogarty International Center</td>
</tr>
<tr>
<td>WH</td>
<td>WHI</td>
<td>Women’s Health Initiative</td>
</tr>
</tbody>
</table>

\(^1\) No longer being assigned. New institutes are AR (NIAMS) and DK (NIDDK).
\(^2\) No longer being assigned. Now part of RR (NCRR).

**Figure 2 - Grant Abbreviation and Institute Acronyms for ID field**
<table>
<thead>
<tr>
<th>Two-character Grant Abbreviation</th>
<th>Institute Acronym</th>
<th>Full Institute Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AH</td>
<td>BHP</td>
<td>formerly Division of Associated Health Professions</td>
</tr>
<tr>
<td>DH</td>
<td>BHP</td>
<td>formerly Division of Dentistry</td>
</tr>
<tr>
<td>MB</td>
<td>BHP</td>
<td>Division of Disadvantaged Assistance</td>
</tr>
<tr>
<td>NU</td>
<td>BHP</td>
<td>Division of Nursing</td>
</tr>
<tr>
<td>PE</td>
<td>BHP</td>
<td>Division of Medicine</td>
</tr>
<tr>
<td>SA</td>
<td>BHP</td>
<td>Division of Student Assistance</td>
</tr>
<tr>
<td>ST</td>
<td>OHS</td>
<td>Office of Healthy Start</td>
</tr>
<tr>
<td>FOOD AND DRUG ADMINISTRATION (FDA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FD</td>
<td>FDA</td>
<td>Food and Drug Administration</td>
</tr>
<tr>
<td>BA</td>
<td>FDA</td>
<td>Center for Biologics Evaluation and Research-Bacterial Products</td>
</tr>
<tr>
<td>BB</td>
<td>FDA</td>
<td>Center for Biologics Evaluation and Research-Biochemistry and Biophysics</td>
</tr>
<tr>
<td>BC</td>
<td>FDA</td>
<td>Center for Biologics Evaluation and Research-Blood and Blood Product</td>
</tr>
<tr>
<td>BD</td>
<td>FDA</td>
<td>Center for Biologics Evaluation and Research-Cytokine Biology</td>
</tr>
<tr>
<td>BE</td>
<td>FDA</td>
<td>Center for Biologics Evaluation and Research-Product Quality Control</td>
</tr>
<tr>
<td>BF</td>
<td>FDA</td>
<td>Center for Biologics Evaluation and Research-Virology</td>
</tr>
<tr>
<td>BG</td>
<td>FDA</td>
<td>Center for Biologics Evaluation and Research-Transfusion</td>
</tr>
<tr>
<td>BH</td>
<td>FDA</td>
<td>Center for Biologics Evaluation and Research-Hematology</td>
</tr>
<tr>
<td>CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE</td>
<td>NCIPC</td>
<td>National Center for Injury Prevention and Control</td>
</tr>
<tr>
<td>CI</td>
<td>CID</td>
<td>Center of Infectious Diseases</td>
</tr>
<tr>
<td>DP</td>
<td>NCCDPHP</td>
<td>National Center for Chronic Disease Prevention and Health Promotion</td>
</tr>
<tr>
<td>EH</td>
<td>NCEH</td>
<td>National Center for Environmental Health</td>
</tr>
<tr>
<td>OH</td>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>PS</td>
<td>CPS</td>
<td>Center for Prevention Services</td>
</tr>
</tbody>
</table>

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION (ADAMHA)  
see codes under Substance Abuse and Mental Health Services Administration and codes AA, DA and MH under National Institutes of Health

Figure 2 - Grant Abbreviation and Institute Acronyms for ID field cont.
<table>
<thead>
<tr>
<th>Two-character Grant Abbreviation</th>
<th>Institute Acronym</th>
<th>Full Institute Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICE OF THE ASSISTANT SECRETARY OF HEALTH (OASH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FP</td>
<td>OFP</td>
<td>Office of Family Planning</td>
</tr>
<tr>
<td>MP</td>
<td>OMH</td>
<td>Office of Minority Health</td>
</tr>
<tr>
<td>PG</td>
<td>OAPP</td>
<td>Office of Adolescent Pregnancy Programs</td>
</tr>
<tr>
<td>SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION (SAMHSA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS</td>
<td>SAMHSA</td>
<td>Substance Abuse and Mental Health Services Administration</td>
</tr>
<tr>
<td>OA</td>
<td>SAMHSA</td>
<td>Office of the Administrator, SAMHSA</td>
</tr>
<tr>
<td>SM</td>
<td>CMHS</td>
<td>Center for Mental Health Services</td>
</tr>
<tr>
<td>SP</td>
<td>CSAP</td>
<td>Center for Substance Abuse Prevention</td>
</tr>
<tr>
<td>TI</td>
<td>CSAT</td>
<td>Center for Substance Abuse Treatment</td>
</tr>
</tbody>
</table>

AGENCY FOR HEALTH CARE POLICY AND RESEARCH (AHCPR)

<table>
<thead>
<tr>
<th>Two-character Grant Abbreviation</th>
<th>Institute Acronym</th>
<th>Full Institute Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS</td>
<td>AHCPR</td>
<td>Agency for Health Care Policy and Research</td>
</tr>
</tbody>
</table>

Source: Information Systems Branch, Division of Research Grants, National Institutes of Health: July 1993

Figure 2 - Grant Abbreviation and Institute Acronyms for ID field cont.
More on 1994 MeSH

Short forms available

Please note that short forms are available for the following two headings in the 1994 MeSH:

- Receptor Protein-Tyrosine Kinase
  DF: RTKS

- Transferases (Other Substituted Phosphate Groups)
  DF: TRANSFERASES OSPG

Data form abbreviation

Also, the data form abbreviation for the heading Transformation, Bacterial should read DF: TRANSFORM BACT instead of TRANSFORMATION BACT.

Annotation for Water

In addition, the annotation for the MeSH heading Water should read “heavy water = DEUTERIUM OXIDE” since that heading was newly added to MeSH for 1994.

Geographic corrections

The following two headings show the corrected history and online notes. Searchers may wish to copy them and paste them in the 1994 Annotated MeSH.

Czech Republic
Z1.542.248.395  Z1.586.250.500
94
use CZECHOSLOVAKIA to search CZECH REPUBLIC 1971-93

Slovakia
Z1.542.248.797  Z1.586.250.750
94
use CZECHOSLOVAKIA to search SLOVAKIA 1971-93

Black squares in the Annotated MeSH

Finally, you may have noticed that pre-explodable geographic headings are preceded by a black square in spite of the fact that page I-155 of the 1994 Annotated MeSH says that this symbol could not be printed. We apologize for the confusion that may have resulted from this apparent contradiction.

Searching new MeSH headings

NLM has added 717 new Main Headings (descriptors) to MeSH (Medical Subject Headings) for 1994 which will become part of FILE MESH on December 13, 1993. To browse only new headings, a searcher can use the following strategy after December 13. It combines the date of the Date Major Established (DX) field with D (RY) for Descriptor in the Record Type field:

SS 1 /C?
USER:
940101 (dx) and d (ry)

PROG:
SS (1) PSTG (717)
USER:
prt mh, aq, an, ms, mn

The DX value for a new heading is always a 6-digit number beginning with the last 2 digits of the year for which the heading was introduced followed by ‘0101.’

To find out the total number of descriptors in MeSH, just search for D (RY). Other fields with searchable information, such as the BX (Backward Cross Reference) or MS (MeSH Scope Note) fields, may be identified with the EXPLAIN MESH command.
BIOETHICSLINE update

The BIOETHICS file is scheduled for regeneration in early February 1994. In addition to incorporating 1994 MeSH terms generated from Bioethics Thesaurus Keywords, the regeneration will introduce several new or retroactively changed Keywords and an interesting new Subject Caption.

Planning is now underway for programming changes at NLM that will permit candidate BIOETHICSLINE records from MEDLINE or HEALTH to be downloaded to a holding file. Here selected records will be augmented with more precise Keywords, Subject Captions, and other features specific to BIOETHICSLINE and then added to the database without the need for duplicative keying and proofreading of citations and abstracts. The new programming will facilitate faster input to BIOETHICSLINE of citations from the medical journal literature, while freeing up additional time for indexing bioethics citations from the non-journal and non-medical literature. Search enhancements are also anticipated.

Indexing vocabulary changes

Following is the list of new 1994 BIOETHICS Keywords (KW) that will be online in February:

- BUDDHIST ETHICS
  (formerly Buddhism)
- CHRISTIAN SCIENTISTS
  (formerly Christian Science)
- COMPASSION
- CONGENITAL DISORDERS
  (formerly Congenital defects)
- COVENANT
- DISABLED
  (formerly Handicapped)
- DNA DATA BANKS
- GENETIC DISORDERS
  (formerly Genetic defects)
- HINDU ETHICS
  (formerly Hinduism)
- LOW BIRTH WEIGHT
- MANAGED CARE PROGRAMS
- MENTALLY DISABLED
  (formerly Mentally handicapped)
- ORGANIZATION AND ADMINISTRATION
- PHYSICALLY DISABLED
  (formerly Physically handicapped)
- PROTESTANTS
  (formerly Protestantism; PROTESTANT ETHICS still exists)
- PSYCHIATRIC WILLS
- QUALITY OF HEALTH CARE
- RESUSCITATION
- RISK
- ROMAN CATHOLICS
  (formerly Roman Catholicism; ROMAN CATHOLIC ETHICS still exists)
- SPOUSAL NOTIFICATION
- TISSUE BANKS
  (formerly Tissue banking)
- TREATMENT OUTCOME
- WOMEN’S HEALTH
- WOMEN’S HEALTH SERVICES

New subject caption for analytical citations

A new Subject Caption that has powerful potential for limiting searches has been retroactively added to BIOETHICSLINE records using an algorithm based on patterns of indexing that tend to correlate with more analytical or substantive discussions of bioethical issues. Limiting is achieved by ANDing the search statement AN (SC) to retrieved sets of citations on specific topics.

The AN Subject Caption also automatically limits retrieval to records published since 1980. It was generated by an algorithm consisting of the following search strategy: (KW) *ETHICAL ANALYSIS OR *MORAL POLICY OR POLICY ANALYSIS OR REVIEW OR PH (SC) AND GREATER THAN 79 (YR).

Searchers are advised to use any general limiting strategy with caution as, almost inevitably, some citations of interest to the user will be lost in the process. However, for topics with many postings, limiting to “analytical” discussions may be the most efficient way to cut retrieval meaningfully.

Alternative general Keyword limiting strategies may be useful for particular search requests. Following are two examples:
For ethical guidelines or official policies on a particular issue: (KW) CODES OF ETHICS OR *GUIDELINES OR *ORGANIZATIONAL POLICIES (consider also *INSTITUTIONAL POLICIES OR *STANDARDS);

For empirical research: (KW) EVALUATION OR EVALUATION STUDIES OR SURVEY (consider also STATISTICS).

**Availability of 1994 Bioethics Thesaurus**

The 1994 edition of the Bioethics Thesaurus will be available for $10 ($15 overseas) in February. The new Thesaurus incorporates all current Keyword Descriptors used in indexing and searching BIOETHICSLINE, and annotates most of these Keywords with explanatory scope notes and cross-references to broader, narrower, and related terms. It also includes a selected list of ‘major issue’ BIOETHICSLINE Keywords and a full list of Subject Captions. The Thesaurus can be ordered from:

Bioethics Information Retrieval Project
Kennedy Institute of Ethics
Georgetown University
Washington, DC 20057-1065
800-MED-ETHX
202-687-6738

All orders must be prepaid; checks should be made payable to the Kennedy Institute of Ethics; charges to Master Card or Visa are also accepted.
DIRLINE now available for lease

DIRLINE (Directory of Information Resources Online) is now available as part of NLM’s tape leasing program. The fee is $1,000 per year. DIRLINE contains descriptions and contact information for approximately 15,000 biomedical resources. These resources are, with one exception, non-bibliographic and include organizations, projects, electronic bulletin boards, and other types of useful sources. It is often difficult to obtain this type of information. DIRLINE serves as a yellow pages, directing users to support groups, voluntary health organizations, cell culture collections, and electronic resources.

DIRLINE subfiles

DIRLINE is composed of eleven subfiles, each focusing on a different subject and each produced somewhat differently. They are described below; the name of each agency or subfile is followed by the searchable Source Identifier (SI) that can be used to limit your search to items in that specific subfile.

Office of Disease Prevention and Health Promotion - (SI) HR

The U.S. Department of Health and Human Services’ Office of Disease Prevention and Health Promotion is responsible for the National Health Information Center. This information center gathers and disseminates information about health promotion and disease prevention. Their subfile of about 1,100 records focuses on organizations involved in those types of activities.

Self-Help Clearinghouses - (SI) SHC

In 1988, Surgeon General C. Everett Koop supported an initiative in self-help and public health. The Surgeon General’s office supported an effort by NLM to add relevant information to DIRLINE. Since at that time there were an estimated 15,000 self-help groups in the U.S., the decision was made to add information about self-help clearinghouses. These clearinghouses, located throughout the country, assist individuals and local groups to create self-help and mutual support groups as the need arises. The small subfile is maintained for NLM by the American Self-Help Clearinghouse, St. Clares-Riverside Medical Center, Denville, New Jersey.

Regional Alcohol and Drug Awareness Resource Network - (SI) RADAR

The Regional Alcohol and Drug Awareness Resource Network (RADAR) is a system of organizations working with the Office of Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration (SAMHSA). These provide a broad range of services including library services, information and referral, outreach, and promotional activities.

CDC National AIDS Clearinghouse - (SI) AIDS

AIDS information resources are supplied by the CDC National AIDS Clearinghouse. The information contained in DIRLINE consists of descriptions of over 2,000 national, international, and large regional organizations and other resources such as databases and electronic systems. This is a subset of a database of over 17,000 such resources that is used to respond to queries to the Clearinghouse as well as to the National AIDS Hotline.

Directory of Biotechnology Information Resources - (SI) DBIR

The Directory of Biotechnology Information Resources (DBIR) is an NLM database containing information about a wide variety of biotechnology-related resources including organizations, databases and networks, nomenclature committees, and publications. This database was formerly available on TOXNET, but is currently available only as part of DIRLINE.

NIH Research Resources - (SI) NIHRES

The National Institutes of Health (NIH) supports a large number of resources which are potentially useful to biomedical scientists nationwide. Unfortunately, it has proven difficult for those outside of NIH to learn about these resources. NLM has
worked with the various components of NIH to obtain this information and add it to DIRLINE. The NIH Research Resources subfile contains descriptions of over 300 resources that may be of interest to others in the biomedical community. These include such resources as cell culture collections, electron microscopy facilities, primate colonies, protein purification laboratories, etc. Using this subfile, scientists may be able locate items which are needed for their research.

Health Services Research Information - (SI) HSRI

As part of NLM’s efforts in expanding information in health services research and technology assessment, a subfile in this subject area was added to DIRLINE in 1989. The subfile contains descriptions of organizations that are working in this field, producing guidelines and performing technology assessments.

History of Medicine Division, National Library of Medicine - (SI) HMD

The History of Medicine Division of the National Library of Medicine produces a small subfile consisting of descriptions of libraries with significant special collections in the history of medicine.

Poison Control Centers - (SI) PCC

The American Association of Poison Control Centers (AAPCC) accredits regional poison control centers. This small subfile, providing the name, address, telephone number, service area, and accreditation level, is produced as a collaboration between AAPCC and NLM.

National Center for Education in Maternal and Child Health - (SI) MCH

The National Center for Education in Maternal and Child Health (NCEMCH), Georgetown University, collects information about organizations that support efforts to improve the health of women and children. This subfile includes a wide range of organizations concerned with genetic disorders, prenatal care, nutrition, chronic illnesses, child abuse/neglect, disabilities, and social work. The information included in this subfile is also available through the publications of the Center.

National Library of Medicine (formerly NRC) - (SI) NLM

When the DIRLINE database was started in 1983 one of the original subfiles was provided by the Library of Congress (LC). LC created and maintained the National Referral Center Database (NRC) which was not limited to science, but covered resources in many interesting subject areas. The entire NRC database was added to DIRLINE. The agreement for the use of the LC data precluded NLM from leasing that data to a third party. In 1992 LC ceased maintaining the NRC database, released the data to NLM and encouraged NLM to continue maintaining as much of the database as possible. At that time NLM assumed responsibility for the biomedical subset of the original NRC database. Approximately half of the original database has been retained in DIRLINE as basis for the new NLM subfile. This subfile, covering general biomedicine, is now being revised and expanded as new resources are identified. All types of non-bibliographic information resources are included such as organizations, programs, and electronic resources.

MeSH indexing used

While the various subfile producers may use different terminology when creating their own records, the entire database is indexed using the MeSH vocabulary to improve retrieval. DIRLINE is also available through Grateful Med®, where it may be easily searched without any knowledge of command language.

When to use DIRLINE

DIRLINE is a useful tool for those seeking consumer information, such as health care providers seeking information to give to a patient or client. It is also useful in a hospital library setting when trying to direct patients and their families to additional sources of information or support services. It is also an avenue to locate specialized information easily such as may be produced by organizations that focus on a particular disease.
**DIRLINE contact person**

Any suggestions for improving DIRLINE, for new resources to be considered for inclusion, or corrections to existing information should be directed to:

DIRLINE Representative  
Specialized Information Services  
National Library of Medicine  
8600 Rockville Pike  
Bethesda, MD 20894  
301-496-3147  
Internet: Deena_Pers@occshost.nlm.nih.gov
Gold Standard Search

Thank you to everyone who mailed in search strategies in response to the Gold Standard Search article in the July-August 1993 issue of the Technical Bulletin. This feature offers searchers a chance to match wits with the NLM staff on a search strategy formulation. The Gold Standard search strategies are developed here at NLM.

A little background

For those of you who have been following this feature for some time, you may notice a change in the wording of the last statement of the preceding paragraph - it no longer states “matching wits with the experts.” The new wording is an acknowledgment of a change that has taken place in the way in which the search strategies are now formulated. Originally, Gold Standard Searches were selected from a pool of searches done at NLM or the National Institutes of Health Library and then checked by an “expert” team who developed their own strategy and evaluated the original search strategy against it. However, to keep the search topics current, the Gold Standard Searches are no longer selected from this pool. The search subjects and strategies are now developed exclusively for the purpose of creating this exercise for you.

The search request published in the July-August 1993 issue was:

The use of RU 486 in humans. First find the earliest citation in the MEDLINE files and then find the articles published in the current year.

The winners

There were two winners! Our congratulations go to Paul Tobin, Librarian at St. Mary’s Hospital of Brooklyn and Hazel Benson of the Pharmacy Library at Ohio State University. Both winners searched ELHILL directly using the command language. The Gold Standard Search is shown in Figure 1; Paul Tobin’s strategy is shown in Figure 2; and Hazel Benson’s strategy is shown in Figure 3.

Analysis of the search strategies

CHEMLINE vs. ChemID

One of the purposes of this Gold Standard Search was to illustrate the use of the chemical dictionary files - ChemID and CHEMLINE - that are available online. Mr. Tobin went into CHEMLINE, the royalty file containing data provided by the Chemical Abstracts Service (CAS) and Ms. Benson chose to search ChemID, which provides data available from non-royalty sources. Either file will yield the information required to complete this search successfully, that is the CAS Registry Number (RN) and the Locator (LO) fields. It costs approximately $0.14 to search and print the record for RU 486 in ChemID and about $2.00 to search and print the information from CHEMLINE. When a record is available in ChemID it is a reasonable and certainly less expensive choice than CHEMLINE. However, for some chemicals, CHEMLINE may be the sole source of the data.

You will notice one searcher qualified the chemical name with (SY), thereby instructing the computer to look for the chemical in the Synonym field and the other one did not. It is not necessary to qualify your chemical name. The computer will automatically look through the Synonym field, along with other fields, such as Name (NM) and Classification Code (CC), for the chemical. So entering the chemical name without a qualifier, such as SY, allows you to search through more fields for your chemical. In this case, however, both strategies came up with the same result.

Registry Numbers

One of the key pieces of data you retrieve from ChemID or CHEMLINE is the CAS Registry Number (RN). The RN data element was introduced in 1980 (Date of Entry (DA) 800531) and is perhaps the easiest way to search for a chemical in files MED80 and later. Searching on the CAS Registry Number you don’t need to worry about naming variations for the chemical (i.e., RU 486 or RU486 or RU-486); you don’t need to know when the MeSH heading, MIFEPRISTONE, came into use (1990), and you can be confident that any citations using a listed synonym (SY) or the MeSH heading will also be indexed with the RN number shown.
Most searchers did go into one of the two dictionary files and they used the Locator field to point them to the earliest entry; however, they continued to search on text word combinations, even during the time period when the RN was used in indexing. **Once you have found the RN, use it!** Please note that you may find citations in the database with RU 486 (or RU486 or RU-486) in the Text Word field that are not indexed with the RN for this chemical. This happens because even though the compound is mentioned in the abstract, it is presumably not a major point of the article. Unless you are doing an extremely comprehensive search, searching by the RN is preferable to Text Word searching.

However, if you are searching for a chemical in years 1980 and earlier, then it would be necessary to search Text Words, to ensure that you were not missing any relevant citations. Neither of the Gold Standard winners did this, but in this case it didn’t matter because this chemical wasn’t cited in the literature until after the RN data element was created. Mr. Tobin searched on the RN both in MED80 and in MEDLINE. Ms. Benson searched on the RN in MED80, but preferred to search on the MeSH heading in the current file. Because the MeSH heading was introduced in 1990 and because the MEDLINE file at the time this search was done went back to 1990, searching on the MeSH heading worked; however, for chemicals coming into existence since 1980, when RN was introduced as a data element, it would be better to search on the RN. For chemicals existing before 1980, before the RN data element was created, it would be necessary to search using Text Words.

You will notice, that one searcher used the RN qualifier in searching the CAS Registry Number in MED80 and one searcher did not. As evidenced by the fact that both searchers received identical responses to their queries, it is not necessary to use (RN) after keying in a CAS Registry Number.

**Finding the earliest mention of RU 486 - the Locator field**

The Locator (LO) field in both the CHEMLINE and ChemID files shows for each chemical entry every database in MEDLARS and TOXNET which has a citation or data relevant to that chemical. You may notice in comparing Figures 1 and 2 that the databases are listed in separate LO fields in CHEMLINE and together in a single LO field in ChemID; however, the same information is there in each file, only the presentation differs. You may also notice that in the ChemID record, the Backfiles listed include MED83 and MED86, two files that have been subsumed into MED80 and MED85. MEDLINE backfile listings will be updated when ChemID is regenerated. Watch future issues of the *Technical Bulletin* for an announcement.

The LO field for RU 486 shows that the earliest MEDLINE file containing citations is MED80. Both searchers went into MED80 and narrowing their retrieval to English and HUMAN (as specified in the instructions) found 5 citations; the earliest citation found was in *Lancet*, April 7, 1984. However, the earliest citation indexed with this RN, in file MED80, is actually a French language citation from the May 17, 1982 issue of *Comptes Rendus des Seances de l Academie des Sciences, Serie III. Sciences de la Vie (Montreuil)*. Honorable mentions go to Katherine Alexander of Springdale Memorial Hospital Library, Springdale, Arkansas and Laura Baird of the National Academy of Sciences, Washington, D.C. for pointing this out.

Winners were offered a choice of a free copy of Grateful Med or one hour of free search time and both selected the free search time.

**Choosing a file**

For this search, CHEMLINE or ChemID was the correct file to search initially and, in fact, most entries received did search one of these two files first. And everyone who searched these files did use the Locator field to point them to the MED80 backfile for the earliest citation.

**Search strategy suggestions**

This search strategy was extremely straightforward.

1. Search the chemical dictionary files first.
2. Use the RN found there to search in other files.
3. Check the Locator field to see which databases to search (in this case - MED80 and MEDLINE).
4. Check the earlier files by Text Word searching to ensure there are no citations listed before the RN data element was introduced.
The Gold Standard Search first went into ChemID, as Ms. Benson did to locate the RN; and then searched exclusively on RN in MEDLINE, as Mr. Tobin did. However the Gold Standard Search also searched on Text Words in MED80 (and MED75 and MED66 - these latter files are not shown) to ensure that no earlier citations on RU 486 were present.

Once again, thanks to all who submitted entries and thank you for the kind comments about how much you enjoy this feature.

**The next Gold Standard Search**

The search question is:

**How many of the articles published in 1993 on the subject of AIDS in Italy are from Italian publications?**

Results will be published in the March-April 1994 Technical Bulletin. Entries must be received by February 15, 1994, to be considered.

If you mail us a copy of your search strategy with a printout of citations and abstracts and your strategy is selected for publication you could win either a copy of Grateful Med or one hour of free search time. In cases of multiple submissions of identical winning strategies, the first one to arrive across the editor’s desk is the prize winner. [Editor’s note: This has never happened. Every search strategy received, winners and non-winners, has been unique, demonstrating no two searchers ever seem to think exactly alike.]

**Search hints for direct searchers**

See page 18 of the September-October 1993 issue of the Technical Bulletin for the latest information on searching by place of publication. Select your database carefully.

**Search hints for Grateful Med users**

See page 18 of the September-October issue of the Technical Bulletin for the latest information on searching by place of publication. Select your database carefully. Remember to use the F10 key to look at MeSH headings and check page 3-9 of the User’s Guide for the section on beginning a line with a slash (/). Users with the Macintosh version of Grateful Med should view MeSH headings by clicking on Find MeSH Term on the search screen and check page 4-4 of the User’s Guide for the section on beginning a line with a slash (/).

**Reminder**

There are no exact answers or absolutely correct strategies, only best approximations, just like real life. Good luck!

Please send a copy of your search strategy with the retrieval, including printed abstracts, which database was searched and whether you searched directly or using Grateful Med to:

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

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28
SS 1 /C?
USER:
file chemid

PROG:
YOU ARE NOW CONNECTED TO THE CHEMID (NON-ROYALTY) FILE.

SS 1 /C?
USER:
ru 486

PROG:
SS (1) PSTG (1)

SS 2 /C?
USER:
prt dl

PROG:

1
RN - 84371-65-3
ON - 83203-42-3 [RTECS]
ON - 83203-42-3 (TOXLIT)
ON - 122742-25-0 (TOXLIT)
MF - C29-H35-N-O2 [RTECS:USPDDN]
N1 - Estra-4,9-Dien-3-One, 11-(4-(Dimethylamino)phenyl)-17-Hydroxy-17-(1-
    Propynyl)-(11-beta, 17-beta) [RTECS]
NM - Mifepristone [MESH]
NM - Mifepristone [INN] [USPDDN]
SY - Mifepristona [Spanish] [NLM]
SY - Mifepristone [RTECS]
SY - Mifepristonum [Latin] [NLM]
SY - R 38486 [MESH;RTECS]
SY - RU 38486 [MESH;RTECS]
SY - Ru 486 [MESH;RTECS]
SY - RU 486-6 [RTECS]
SY - 17-beta-Hydroxy-11-beta-(4-Dimethylaminophenyl)-17-alpha-(prop—
    YNYL)OESTRA-4,9-DIEN-3-ONE [RTECS]
MH - Mifepristone
CC - Hormone [RTECS]
CC - Reproductive Effect [RTECS]
NO - 11-((4-Dimethylamino)phenyl)-17-hydroxy-17- (1-propynyl)estra-4,9-dien-3-one.
Mifepristone is a progestational and glucocorticoid hormone antagonist. Its inhibition of
progesterone induces bleeding during the luteal phase and in early pregnancy by
releasing endogenous prostaglandins from the endometrium or decidua. As a
    glucocorticoid receptor antagonist, the drug has been used to treat hypercortisolism in
    patients with nonpituitary Cushing's syndrome. [MESH]
LO - TOXLINE; TOXLIT; MEDLINE; MED86; MED83; MED80; MESH; CANCERLIT;
    AIDSLINE; RTECS; ETICBACK; DART

Figure 1 - The Gold Standard Search
SS 2 /C?
USER:
file med80

PROG:
YOU ARE NOW CONNECTED TO THE BACK80 (1980 - 84) FILE.

SS 1 /C?
USER:
84371-65-3

PROG:
SS (1) PSTG (24)

SS 2 /C?
USER:
ts (la) :eng: and :human: (mh)

PROG:
SS (2) PSTG (5)

SS 3 /C?
USER:
prt so

PROG:

1

2

3
SO - J Clin Endocrinol Metab 1984 Jul;59(1):25-8

4
SO - Lancet 1984 Apr 7;1(8380):767-8

• Earliest English language citation.

5
SO - Contraception 1984 May;29(5):399-410

SS 3 /C?  • This part of the strategy is looking for citations that might have been
USER:
(tw) ru

PROG:
STRINGSEARCH on the variations in naming.

SS (3) PSTG (179)

Figure 1 - The Gold Standard Search cont.
SS 4 /C?
USER:
3 and 80 (yr)

PROG:
SS (4) PSTG (23)

- This Text Word search followed by the STRINGSEARCH shown below
  was also done in files MED75 and MED66. There was no retrieval.

SS 5 /C?
USER:
ts (ti) :ru#486: or :ru#486: (ab) or :ru486: (ti) or :ru486: (ab)

PROG:
*NONE-

SS 5 /C?
file med

PROG:
YOU ARE NOW CONNECTED TO THE MEDLINE (1990 - 93) FILE.

SS 1 /C?
USER:
84371-65-3

PROG:
SS (1) PSTG (607)

SS 2 /C?
USER:
1 and 93 (yr)

PROG:
SS (2) PSTG (105)

SS 3 /C?
USER:
ts (la) :eng: and :human: (mh)

PROG:
SS (3) PSTG (45)

Figure 1 - The Gold Standard Search cont.
Figure 2 - Paul Tobin's search strategy

Mifepristone is a progestational and glucocorticoid hormone antagonist. Its inhibition of progesterone induces bleeding during the luteal phase and in early pregnancy by releasing endogenous prostaglandins from the endometrium or decidua. As a glucocorticoid receptor antagonist, the drug has been used to treat hypercortisolism in patients with nonpituitary Cushing’s syndrome. [MESH]
USER:
file med80

PROG:
YOU ARE NOW CONNECTED TO THE BACK80 (1980 - 84) FILE.

SS 1 /C?
USER:
84371-65-3

PROG:
SS (1) PSTG (24)

SS 2 /C?
USER:
ts (la) :eng: and :human: (mh)

PROG:
SS (2) PSTG (5)  • Same 5 citations shown in the Gold Standard Search.

SS 3 /C?
file med

PROG:
YOU ARE NOW CONNECTED TO THE MEDLINE (1990 - 93) FILE.

SS 1 /C?
USER:
84371-65-3

PROG:
SS (1) PSTG (607)

SS 2 /C?
USER:
1 and 93 (yr)

PROG:
SS (2) PSTG (105)

SS 3 /C?
USER:
ts (la) :eng: and :human: (mh)

PROG:
SS (3) PSTG (45)

Figure 2 - Paul Tobin’s Search Strategy cont.
USER:  
file chemid  

PROG:  
YOU ARE NOW CONNECTED TO THE CHEMID (NON-ROYALTY) FILE.  

SS 1 /C?  
USER:  
ru 486 (sy)  

PROG:  
SS (1) PSTG (1) • Same record retrieved in the Gold Standard Search, Figure 1.  

SS 2 /C?  
USER:  
file med80  

PROG:  
YOU ARE NOW CONNECTED TO THE BACK80 (1980 - 84) FILE.  

SS 1 /C?  
USER:  
84371-65-3 (rn)  

PROG:  
SS (1) PSTG (24)  

SS 2 /C?  
USER:  
ts (mh) :human: and :eng: (la)  

PROG:  
SS (2) PSTG (5) • Same citations retrieved by Paul Tobin.  

SS 3 /C?  
USER:  
file medline  

PROG:  
YOU ARE NOW CONNECTED TO THE MEDLINE (1990 - 93) FILE.  

SS 1 /C?  
USER:  
mifepristone  

PROG:  
SS (1) PSTG (607)  

SS 2 /C?  
USER:  
1 and 93 (yr)  

Figure 3 - Hazel Benson’s search strategy
Figure 3 - Hazel Benson’s search strategy cont.
SERIALS UPDATE
INDEXED TITLES UPDATED, SEPTEMBER-OCTOBER 1993

The following titles cited in MEDLINE and HEALTH, 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 SER- LINE. For further information, please contact MMS or Ms. Esther Baldinger, (301) 496-1276, Technical Services Division, NLM.

TITLES SELECTED FOR INDEXING, SEPTEMBER-OCTOBER 1993

HLI AUSTRALIAN MEDICAL RECORD JOURNAL
AUST MED REC J
13,1983?—
MEDICAL RECORD ASSOCIATION OF AUSTRALIA
LIDCOMBE AUSTRALIA
RUNNING TITLE: AMR JOURNAL, CONTINUES:
AUSTRALIAN MEDICAL RECORD, WHICH IS NOT
IN THE NLM COLLECTION.
INDEXING BEGAN WITH V23N1,MAR 1993.
W1 AU628D 0817-3907
SR0058141 JC: BVP

HLI HEALTH ECONOMICS
HEALTH ECON
1,1992—
JOHN WILEY
CHICHESTER ENGLAND
SOME VOLS. HAVE SUPPLS.
INDEXING BEGAN WITH V1N1,APR 1992.
W1 HE318BLW 1057-9230
SR0072286 JC: BVP

HLI HEALTHCARE HUMAN RESOURCES
HEALTHC HUM RESOUR
1,1992—
COR RESEARCH
SANTA BARBARA CA UNITED STATES
INDEXING BEGAN WITH V1N1,JAN 1992.
W1 HE303SR 1060-9253
SR0073679 JC: BVS

HLI INTERNATIONAL JOURNAL OF HEALTH CARE
QUALITY ASSURANCE
INT J HEALTH CARE QUAL ASSUR
1,1987—
MCB UNIVERSITY PRESS
BRADFORD ENGLAND
INDEXING BEGAN WITH V6N1,1993.
W1 IN766UL 0952-6862
SR0065946 JC: BVT

HLI MANAGED CARE QUARTERLY
MANAG CARE Q
1,1991,WINTER 1993—
ASPEN PUBLISHERS
FREDERICK MD UNITED STATES
INDEXING BEGAN WITH V1N1,WINTER 1993.
W1 MA57KB 1064-5454
SR0075730 JC: BVW

HLI JOURNAL OF HEALTH CARE BENEFITS
J HEALTH CARE BENEFITS
1N1,SEP/OCT 1991—
WARREN, GORHAM AND LAMONT
BOSTON MA UNITED STATES
INDEXING BEGAN WITH V3N1,SEP/OCT 1993.
W1 JO67BGE 1057-5073
SR0072554 JC: BVU

HLI JOURNAL OF MANAGEMENT IN MEDICINE
J MANAG MED
1N1,1986/87—
MCB UNIVERSITY PRESS
BRADFORD ENGLAND
PUBLISHED: LONDON: HENRY STEWART
INDEXING BEGAN WITH V8N1,1994.
W1 JO748DK 0268-9235
SR0058591 JC: BVV

HLI JOURNAL OF PROSTHODONTICS
J PROSTHODONT
1N1,SEP 1992—
SAUNDERS
PHILADELPHIA PA UNITED STATES
OFFICIAL JOURNAL OF THE AMERICAN COLLEGE
OF PROSTHODONTISTS.
INDEXING BEGAN WITH V1N1,SEP 1992.
W1 JO851EH 1059-941X
SR0073152 JC: BV5
TITLES SELECTED FOR INDEXING, SEPTEMBER-OCTOBER 1993

HLI  MEDICAL INTERFACE
     MED INTERFACE
     1,1988—
     MEDICOM INTERNATIONAL
     BRONXVILLE NY UNITED STATES
     SOME VOLS. HAVE SUPPLS.
     INDEXING BEGAN WITH V6N1, JAN 1993.
     W1 ME342P 0896-4831
     SR0063284 JC: BVX

IDL  PERIODONTOLOGY 2000
     PERIODONTOL 2000
     1,FEB 1993—
     MUNKSGAARD
     COPENHAGEN DENMARK
     EACH ISSUE HAS ALSO A DISTINCT TITLE.
     INDEXING BEGAN WITH VOL. 1, FEB 1993.
     W1 PE7955 0906-6713
     SR0072480 JC: BWS

INI  NIHON KANGO KAGAKKAISHI [JOURNAL OF JAPAN ACADEMY OF NURSING SCIENCE]
     NIHON KANGO KAGAKKAISHI
     1,1981—
     NIHON KANGO KAGAKU GAKKAI
     TOKYO JAPAN
     VOLS. FOR DEC. 1992? INCLUDES
     TRANSACTIONS OF THE ACADEMYS 12TH? ANNUAL MEETING.
     INDEXING BEGAN WITH VOL. 13, NO. 1, JUL 1993.
     W1 NI426TG 0287-5330
     SR0059434 JC: BVO

HLI  QUALITY IN HEALTH CARE
     QUAL HEALTH CARE
     1,1992—
     BMJ PUBLISHING GROUP
     LONDON ENGLAND
     SOME VOLS. HAVE SUPPLS.
     INDEXING BEGAN WITH V1N1, MAR 1992.
     W1 QU158LAH 0963-8172
     SR0072822 JC: BVY

INI  AUSTRALIAN NURSING JOURNAL
     AUST NURS J
     22N11, JUN 1993—
     FEDERAL SECRETARY OF THE AUSTRALIAN NURSING FEDERATION
     MELBOURNE AUSTRALIA
     CONTINUES: AUSTRALIAN NURSES JOURNAL.
     INDEXING BEGAN WITH V22, N11 JUN 1993.
     ON ORDER
     SR0078799 JC: BWT

IM  ARCHIVES OF PEDIATRIC AND ADOLESCENT MEDICINE
     ARCH PEDIATR ADOLESC MED
     148, 1994—
     AMERICAN MEDICAL ASSOCIATION
     CHICAGO IL UNITED STATES
     CONTINUES: AMERICAN JOURNAL OF DISEASES OF CHILDREN.
     ON ORDER
     SR0078614 JC: BWF

IM  ARCHIVES DE PEDIATRIE
     ARCH PEDIATR
     1, 1994—
     ELSEVIER
     PARIS FRANCE
     CONTINUES: PEDIATRIE.
     INDEXING BEGAN WITH V1N1, 1994.
     ON ORDER
     SR0078615 JC: BWH

IDL  CURRENT OPINION IN COSMETIC DENTISTRY
     CURR OPIN COSMET DENT
     2N4, 1993—
     CURRENT SCIENCE
     PHILADELPHIA PA UNITED STATES
     CONTINUES IN PART: CURRENT OPINION IN DENTISTRY.
     CONTINUES THE NUMBERING OF:
     CURRENT OPINION IN DENTISTRY.
     INDEXING BEGAN WITH 1993.
     ON ORDER 1065-6278
     SR0076095 JC: BWQ

TITLE CHANGES, SEPTEMBER-OCTOBER 1993

IM  ARCHIVES OF PEDIATRIC AND ADOLESCENT MEDICINE
     ARCH PEDIATR ADOLESC MED
     148, 1994—
     AMERICAN MEDICAL ASSOCIATION
     CHICAGO IL UNITED STATES
     CONTINUES: AMERICAN JOURNAL OF DISEASES OF CHILDREN.
     ON ORDER
     SR0078614 JC: BWF
TITLE CHANGES, SEPTEMBER-OCTOBER 1993

IDL CURRENT OPINION IN PERIODONTOLOGY
CURR OPIN PERIODONTOL
1993—
CURRENT SCIENCE
PHILADELPHIA PA UNITED STATES
CONTINUES IN PART: CURRENT OPINION IN
DENTISTRY. FORMERLY A SECTION OF: CURRENT
OPINION IN DENTISTRY.
INDEXING BEGAN WITH 1993.
ON ORDER 1065-626X
SR0076096 JC: BWR

IM ENZYME AND PROTEIN
ENZYME PROTEIN
47,1993—
KARGER
BASEL SWITZERLAND
CONTINUES: ENZYME.
INDEXING BEGAN WITH V47N1,1993.
ON ORDER 1019-6773
SR0078597 JC: BWR

IM FORTSCHRITTE AUF DEM GEBIETE DER
RONTGENSTRAHLEN UND DER NEUEN
BILDGEBENDEN VERFAHREN.
ERGANZUNGSBD FORTSCHR GEB
RONTGENSTRAHLEN NEUEN BILDGEB
VERFAHR ERGANZUNGSBD
130,1992—
GEORG THIEME VERLAG
STUTTGART GERMANY
SUPPLEMENT TO: ROFO. FORTSCHRITTE AUF
DEM GEBIETE DER RONTGENSTRAHLEN UND DER
NEUEN BILDGEBENDEN VERFAHREN.
CONTINUES: FORTSCHRITTE AUF DEM GEBIETE
DER RONTGENSTRAHLEN UND DER
NUKLEARMEDIZIN. ERGANZUNGSBD.
INDEXING BEGAN WITH V130,1992.
W1 FO814
SR0078649 JC: BWK

INI INFIRMIERE DU QUEBEC
INFIRM QUE
1N1,SEP/OCT 1993—
ORDRE DES INFIRMIERES ET INFIRMIERS DU
QUEBEC
MONTREAL CANADA
REVUE OFFICIELLE DE L'ORDRE DES INFIRMIERES
ET INFIRMIERS DU QUEBEC. CONTINUES:
NURSING QUEBEC.
INDEXING BEGAN WITH V1N1,SEP./OCT. 1993.
ON ORDER 1195-2695
SR0078561 JC: BV6

IM JOINT COMMISSION JOURNAL ON QUALITY
IM PROGRESS
HLI JT COMM J QUAL IMPROV
19N7,JUL 1993—
MOSBY-YEAR BOOK
ST. LOUIS MO UNITED STATES
CONTINUES: QRB. QUALITY REVIEW BULLETIN.
INDEXING BEGAN WITH V19N7, JULY 1993.
W1 JO1786B 1070-3241
SR0078529 JC: BV3

IM JOURNAL OF GASTROENTEROLOGY
J GASTROENTEROL
1994—
SPRINGER-VERLAG TOKYO
TOKYO JAPAN
CONTINUES: GASTROENTEROLOGIA JAPONICA.
ON ORDER
SR0078773 JC: BWB

INI JOURNAL OF LAW, MEDICINE AND ETHICS
J LAW MED ETHICS
21N1,SPRING 1993—
AMERICAN SOCIETY OF LAW, MEDICINE AND
ETHICS
BOSTON MA UNITED STATES
CALLED ALSO: JLME. CONTINUES: LAW,
MEDICINE AND HEALTH CARE.
INDEXING BEGAN WITH V21N1, SPRING 1993.
W1 JO739
SR0078573 JC: BV9

INI JOURNAL OF WOUND, OSTOMY AND CONTINENCE
NURSING
J WOUND OSTOMY CONTINENCE NURS
21,1994—
MOSBY
ST. LOUIS MO UNITED STATES
OFFICIAL PUBLICATION OF THE WOUND, OSTOMY
AND CONTINENCE NURSES SOCIETY, AN
ASSOCIATION OF ET NURSES. CONTINUES:
JOURNAL OF ET NURSING.
INDEXING BEGAN WITH V21N1,1994.
ON ORDER 1071-5754
SR0078545 JC: BV2
IM OCCUPATIONAL AND ENVIRONMENTAL MEDICINE OCCUP ENVIRON MED
51,1994—
BRITISH MEDICAL JOURNAL AND ASSOCIATED PUBLICATIONS
LONDON ENGLAND
CONTINUES: BRITISH JOURNAL OF INDUSTRIAL MEDICINE.
ON ORDER 1351-0711
SR0078602 JC: BWC

IM ORAL SURGERY, ORAL MEDICINE, ORAL IDL PATHOLOGY, AND ORAL RADIOLOGY, ENDODONTICS
ORAL SURG ORAL MED ORAL PATHOL ORAL RADOL ENDOD
76N1, JUL 1993—
MOSBY ST. LOUIS MO UNITED STATES
RUNNING TITLE: ORAL SURGERY, ORAL MEDICINE, ORAL PATHOLOGY. CONTINUES: ORAL SURGERY, ORAL MEDICINE, ORAL PATHOLOGY.
INDEXING BEGAN WITH V76N1, JUL 1993.
W1 OR125 0030-4220
SR0078700 JC: BWM

IM ADVANCES IN IMMUNITY AND CANCER THERAPY ADV IMMUN CANCER THER
1,1985-2,1986 SPRINGER VERLAG
NEW YORK NY UNITED STATES
INDEXING BEGAN WITH V1,1985.
W1 AD646 0178-2134
SR0055007 JC: 2M9

IM ADVANCES IN INORGANIC BIOCHEMISTRY ADV INORG BIOCHEM
1,1979-8,1990 ELSEVIER/NORTH-HOLLAND
NEW YORK NY UNITED STATES
SUPPLEMENT TO: INORGANIC BIOCHEMISTRY.
INDEXING BEGAN WITH V5,1983.
W1 AD648L 0190-0218
A14240000 JC: 2NF

IM AMERICAN JOURNAL OF PHYSIOLOGIC IMAGING AM J PHYSIOL IMAGING
1N1,1986-7N2,1992 MUNKSGAARD
COPENHAGEN DENMARK
IMPRINT VARIES: NEW YORK: ALAN R. LISS, VOLS. 1-4 (1986-1989); COPENHAGEN:
MUNKSGAARD, VOL. 5 (1990)-
INDEXING BEGAN WITH V1N1,1986.
W1 AM505H 0885-8276
SR0053631 JC: APE

IM CARDIOVASCULAR CLINICS CARDIOVASC CLIN
1,1969-23,1993 F A DAVIS CO
PHILADELPHIA PA UNITED STATES
INDEXING BEGAN WITH 2N1,1970.
W1 CA77N 0069-0384
C07500000 JC: COL
TITLES NO LONGER Indexed, SEPTEMBER-OCTOBER 1993

IDL  CLINICAL PREVENTIVE DENTISTRY
     CLIN PREV DENT
     1,1979-14,1992
     STEVENS PUBLISHING CORPORATION
     WACO TX UNITED STATES
     ISSUE FOR JAN/FEB. 1979 CALLED VOL. 6, NO. 1,
     BUT CONSTITUTES VOL. 1, NO. 1.
     SUPERSEDES: JOURNAL OF PREVENTIVE
     DENTISTRY.
     INDEXING BEGAN WITH 1N1, JAN-FEB 1979.
     W1 CL767K 0163-9633
     C26530000 JC: DH2

IDL  DIASTEMA
     DIASTEMA
     1,1963-16,1988?
     CENTRAL PRINTING, UNIVERSITY OF THE
     WITWATERSRAND
     JOHANNESBURG SOUTH AFRICA
     STUDENT JOURNAL OF THE UNIVERSITY OF THE
     WITWATERSRAND DENTAL SCHOOL.
     INDEXING BEGAN WITH V2N3,1968.
     W1 DI278 0419-0955
     D10040000 JC: E98

IM  MAGNESIUM AND TRACE ELEMENTS
     MAGNEX TRACE ELEM
     9N1,JAN/FEB 1990-10N5/6,1992
     KARGER
     BASEL SWITZERLAND
     CONTINUES: MAGNESIUM.
     W1 MA33AM 1015-3845
     SR0066200 JC: AF3

IM  MOLECULAR BIOThERAPY
     MOL BIOTHER
     1,1988-4,1992
     BUTTERWORTH-HEINEMANN
     STONEHAM MA UNITED STATES
     VOL. 1 (1988-89) COMPLETE IN 6 ISSUES.
     PUBLISHER VARIES: BUTTERWORTH, VOLS. 1-
     2N1 (1988-90); BUTTERWORTH-HEINEMANN,
     VOL. 2N2 (1990);
     INDEXING BEGAN WITH V1N1,1988.
     W1 MO196DC 0952-8172
     SR0062621 JC: AH5

IM  PSYCHIATRIC MEDICINE
     PSYCHIATR MED
     1,1983-10,1992
     RYANDIC PUBLISHING
     LONGWOOD FL UNITED STATES
     SOME ISSUES HAVE ALSO A DISTINCTIVE TITLE.
     ISSUE FOR SEPT. 1984 DESIGNATED SEPT. 1985
     ON SPINE. IMPRINT VARIES.
     INDEXING BEGAN WITH V1N1,1983.
     W1 PS26J 0732-0868
     P53280600 JC: Q9Y

IM  SOVETSKOE ZDRAVOOKHRANENIE
     SOV ZDRAVOOKHR
     1943-1992N1
     IZDATELESTVO MEDITSINA
     MOSKVA RUSSIA
     SUPERSEDES ZA SOTSIALISTICHESKOE
     ZDRAVOOKHRANENIE
     INDEXING FOR ONLINE FILES BEGAN WITH
     W1 SO993 0038-5239
     S33260000 JC: UWK

HLI  TEXTILE RENTAL
     TEXT RENT
     N11,JUL 1979—
     TEXTILE RENTAL SERVICES ASSOCIATION OF
     AMERICA
     HALLANDALE FL UNITED STATES
     CONTINUES LINEN SUPPLY NEWS. THIS TITLE IS
     NOT IN THE NLM COLLECTION.
     INDEXING BEGAN WITH V62N11,JUL 1979 AND
     CEASED WITH V76N12,AUG 1993.
     REGIONAL HOLDINGS 0195-0118
     T07210000 JC: VNP
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